

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Chevron Phillips Chemical Company, LP

AUTHORIZING THE OPERATION OF
Sweeny Old Ocean Facilities
Polyethylene Units 40 And 41
All Other Basic Organic Chemical Manufacturing

LOCATED AT
Brazoria County, Texas
Latitude 29° 4' 30" Longitude 95° 44' 48"
Regulated Entity Number: RN100825249

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: Q3961 Issuance Date: April 24, 2019

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.890 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- G. Emission units subject to 40 CFR Part 63, Subpart A as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.100 which incorporates the 40 CFR Part 63 Subpart by reference.
- H. Emission units subject to 40 CFR Part 63, Subpart DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1130 which incorporates the 40 CFR Part 63 Subpart by reference.
- I. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.302 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
 - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
- J. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
 - (i) Title 30 TAC § 101.352 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
 - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
 - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
 - (v) Title 30 TAC § 101.359 (relating to Reporting)
 - (vi) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
 - (vii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- K. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
 - L. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 6 (Highly Reactive Volatile Organic Compound Emissions Cap and Trade Program) requirements:
 - (i) Title 30 TAC § 101.392 (relating to Exemptions)
 - (ii) Title 30 TAC § 101.401 (relating to Level of Activity Certification)
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A,

Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.
 - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance

from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
 - (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. The permit holder shall comply with the following 30 TAC Chapter 115, Subchapter F requirements (relating to Cutback Asphalt Requirements):
 - A. Title 30 TAC § 115.512(1) (relating to Control Requirements)
 - B. Title 30 TAC § 115.512(2) (relating to Control Requirements)
 - C. Title 30 TAC § 115.512(3) (relating to Control Requirements)
 - D. Title 30 TAC § 115.515 (relating to Testing Requirements)
- 6. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:
 - A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)
 - (ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks
 - (iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

- (iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)
- (v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
- (vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
- (vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
- (viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices
- (ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)
- (x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring
- (xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)
- (xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping
- (xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)
- (xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xvi) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification
- (xvii) Title 30 TAC § 115.547(4) (relating to Exemptions)

B. For the degassing of all transport vessels with a nominal capacity of 8,000 gallons or more, the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 115.541(a) - (c) and (d) (relating to Emission Specifications)
- (ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.
- (iii) Title 30 TAC § 115.542(b), (c) and (e) (relating to Control Requirements)

- (iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
 - (v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
 - (vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
 - (vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices
 - (viii) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)
 - (ix) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring
 - (x) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)
 - (xi) Title 30 TAC § 115.545(1) - (11) and (13) (relating to Approved Test Methods)
 - (xii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping
 - (xiii) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)
 - (xiv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)
 - (xv) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification
7. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams from sources exempt under 30 TAC § 115.727(c)(3).
8. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

- F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
9. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
 10. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

Additional Monitoring Requirements

11. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:
 - (i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or

- (ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.
- F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
- 12. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 13. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the permits by rule identified in the PBR Supplemental Tables in the application), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 14. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 15. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
- 16. The permit holder shall comply with the following requirements for Air Quality Standard Permits:

- A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
- B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
- C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

- 17. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 18. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
 - (1) Title 30 TAC § 117.9020(2)(D)
 - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).
 - C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
- 19. Use of Emission Credits to comply with applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

- (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

20. Use of Discrete Emission Credits to comply with the applicable requirements:

- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

- 21. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

22. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Alternative Requirements

23. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator and TCEQ Executive Director, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

Permit Location

24. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

25. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Alternative Requirement

Applicable Requirements Summary

Unit Summary 18

Applicable Requirements Summary 39

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	Exempt Date = The vent gas stream is not exempt., HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-4	30 TAC Chapter 115, HRVOC Vent Gas	Testing Requirements = Meeting § 115.725(a)., Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities., Waived Testing = The executive director waived testing for identical vents., Alternative Monitoring = Not using alternative monitoring and testing methods., Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule., Vent Gas Stream Control = Vent gas stream is uncontrolled., Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft ³ /hr)., HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	Exempt Date = The vent gas stream is not exempt., HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-4	30 TAC Chapter 115, HRVOC Vent Gas	Testing Requirements = Meeting § 115.725(a)., Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					events and scheduled startup, shutdown, and maintenance activities., Waived Testing = The executive director waived testing for identical vents., Alternative Monitoring = Not using alternative monitoring and testing methods., Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule., Vent Gas Stream Control = Vent gas stream is uncontrolled., Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft ³ /hr)., HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-35-1014	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
40-35-1014	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-36-1013	PROCESS HEATERS/FURNACES	N/A	R7300-002	30 TAC Chapter 117, Subchapter B	No changing attributes.
40-36-1013	PROCESS HEATERS/FURNACES	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
40-RCY-ISO	STORAGE TANKS/VESSELS	N/A	R5112-AMOC	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
40-RCY-ISO	STORAGE TANKS/VESSELS	N/A	60Kb-3	40 CFR Part 60, Subpart Kb	No changing attributes.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	Exempt Date = The vent gas stream is not exempt., HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-4	30 TAC Chapter 115, HRVOC Vent Gas	Testing Requirements = Meeting § 115.725(a)., Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities., Waived Testing = The executive director waived testing for identical vents., Alternative Monitoring = Not using alternative monitoring and testing methods., Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule., Vent Gas Stream Control = Vent gas stream is uncontrolled., Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft ³ /hr)., HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
41-35-1114	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					equal to 612 ppmv.
41-35-1114	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
41-36-1113	PROCESS HEATERS/FURNACES	N/A	R7300-002	30 TAC Chapter 117, Subchapter B	No changing attributes.
41-36-1113	PROCESS HEATERS/FURNACES	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
41-RCY-ISO	STORAGE TANKS/VESSELS	N/A	R5112-AMOC	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
41-RCY-ISO	STORAGE TANKS/VESSELS	N/A	60Kb-3	40 CFR Part 60, Subpart Kb	No changing attributes.
42-05-9201	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-296	30 TAC Chapter 115, HRVOC Cooling Towers	No changing attributes.
42-95-0421	STORAGE TANKS/VESSELS	N/A	R5112-79	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
42-95-0421	STORAGE TANKS/VESSELS	N/A	60Kb-32	40 CFR Part 60, Subpart Kb	No changing attributes.
42-95-0422	STORAGE TANKS/VESSELS	N/A	R5112-79	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
42-95-0422	STORAGE TANKS/VESSELS	N/A	60Kb-33	40 CFR Part 60, Subpart Kb	No changing attributes.
42-97-9610	FLARES	N/A	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
42-97-9610	FLARES	N/A	R5720-145	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
42-97-9610	FLARES	N/A	60A-HI-ST12-1	40 CFR Part 60, Subpart A	Adhering to Heat Content Specifications = Adhering to the requirements in 40 CFR § 60.18(c)(3)(i).
42-97-9610	FLARES	N/A	60A-HI-ST3-1	40 CFR Part 60, Subpart A	Adhering to Heat Content Specifications = Adhering to the requirements in 40 CFR § 60.18(c)(3)(i).
42-97-9610	FLARES	N/A	60A-LO-1	40 CFR Part 60, Subpart A	Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec), Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5).
42-97-9610	FLARES	N/A	60A-LO-2	40 CFR Part 60, Subpart A	Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm)., Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5).

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
42-97-9610	FLARES	N/A	60A-LO-3	40 CFR Part 60, Subpart A	Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm), Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5).
42-97-9610	FLARES	N/A	63A-HI-ST12-1	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(i).
42-97-9610	FLARES	N/A	63A-HI-ST3-1	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(i).
42-97-9610	FLARES	N/A	63A-LO-1	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
42-97-9610	FLARES	N/A	63A-LO-2	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
42-97-9610	FLARES	N/A	63A-LO-3	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
42-97-9620	INCINERATOR	N/A	R7301-1	30 TAC Chapter 117, Subchapter B	CO Emission Limitation = Complying with 30 TAC § 117.310(c)(1)
42-97-9620	INCINERATOR	N/A	R7301-2	30 TAC Chapter 117, Subchapter B	CO Emission Limitation = Complying with an Alternative Case

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					Specific Specification under 30 TAC §§ 117.325 or 117.425
42-97-9820	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-1	30 TAC Chapter 115, Water Separation	No changing attributes.
87-97-1510	SRIC ENGINES	N/A	R7300-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
87-97-1510	SRIC ENGINES	N/A	60III-2	40 CFR Part 60, Subpart III	No changing attributes.
87-97-1510	SRIC ENGINES	N/A	63ZZZZ-2	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
DG-01	SOLVENT DEGREASING MACHINES	N/A	R5412-001	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	R5780-ALL	30 TAC Chapter 115, HRVOC Fugitive Emissions	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	60DDD-ALL	40 CFR Part 60, Subpart DDD	COMPLYING W/ §60.482-10 = YES
FUG-01	FUGITIVE EMISSION UNITS	N/A	60DDD-AMEL	40 CFR Part 60, Subpart DDD	COMPLYING W/ §60.482-10 = NO, EEL = EQUIVALENT EMISSION LIMITATION (EEL) APPROVED BY EPA ADMINISTRATOR UNDER 40 CFR 60.634, USED TO ACHIEVE REDUCTION IN VOC EMISSIONS AT LEAST EQUIVALENT TO REDUCTION ACHIEVED BY CONTROLS REQUIRED IN 40 CFR 60 (NSPS), SUBPART DDD.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FUG-01	FUGITIVE EMISSION UNITS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
GRPEMG-ENG	SRIC ENGINES	EMG-ENG1, EMG- ENG2, EMG-ENG3	R7300-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRPEMG-ENG	SRIC ENGINES	EMG-ENG1, EMG- ENG2, EMG-ENG3	60IIII-1	40 CFR Part 60, Subpart IIII	No changing attributes.
GRPEMG-ENG	SRIC ENGINES	EMG-ENG1, EMG- ENG2, EMG-ENG3	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPENGTK	STORAGE TANKS/VESSELS	EMG-ENGTK1, EMG-ENGTK2, EMG-ENGTK3, FWP-TK1	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35- 6201, 40-35-6310, 40-35-8011, 40-35- 8021, 40-35-80LO	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	Exempt Date = The vent gas stream is not exempt., HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35- 6201, 40-35-6310, 40-35-8011, 40-35- 8021, 40-35-80LO	R5721-4	30 TAC Chapter 115, HRVOC Vent Gas	Testing Requirements = Meeting § 115.725(a)., Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities., Waived Testing = The executive director waived testing for identical vents., Alternative Monitoring = Not using alternative monitoring and testing methods., Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.,

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					Vent Gas Stream Control = Vent gas stream is uncontrolled., Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft ³ /hr)., HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35-6201, 40-35-6310, 40-35-8011, 40-35-8021, 40-35-80LO	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35-6201, 40-35-6310, 40-35-8011, 40-35-8021, 40-35-80LO	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35-6201, 40-35-6310, 40-35-8011, 40-35-8021, 40-35-80LO	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35-6201, 40-35-6310, 40-35-8011, 40-35-8021, 40-35-80LO	63FFFF-3	40 CFR Part 63, Subpart FFFF	No changing attributes.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	Exempt Date = The vent gas stream is not exempt., HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	R5721-4	30 TAC Chapter 115, HRVOC Vent Gas	Testing Requirements = Meeting § 115.725(a)., Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities., Waived Testing = The executive director waived testing for identical vents., Alternative Monitoring = Not using alternative monitoring and testing methods., Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule., Vent Gas Stream Control = Vent gas stream is uncontrolled., Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					feet per hour (ft ³ /hr)., HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35- 6201, 41-35-6310, 41-35-8011, 41-35- 8021, 41-35-80LO	63FFFF-3	40 CFR Part 63, Subpart FFFF	No changing attributes.
PRODDDATM	POLYMER MANUFACTURING PROCESSES	N/A	60DDD-1	40 CFR Part 60, Subpart DDD	No changing attributes.
PROUNIT40	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROUNIT41	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
TK-01	STORAGE TANKS/VESSELS	N/A	R5112-3	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-3	30 TAC Chapter 111, Visible Emissions	No changing attributes.
UNLOAD1	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
UNLOAD1	LOADING/UNLOADING OPERATIONS	N/A	R5211-2	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-2	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-4	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate control is not used., Control Device Type = Smokeless flare
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-5	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria and demonstrating substantially equivalent reduction efficiencies approved by the TCEQ Executive Director.
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	Flare = Operates in compliance with §63.11(b)
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-AMEL	40 CFR Part 63, Subpart FFFF	Flare = Multi-point ground flare operates in compliance with AMEL
VENT40TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-15	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream is emitted from a liquid phase slurry high-density polyethylene manufacturing process., VOC

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					Concentration = VOC concentration is greater than or equal to 408 ppmv.
VENT40TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-16	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
VENT40TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-4	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i.
VENT40TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-5	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i.
VENT40VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-3	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
VENT40VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-6	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
VENT40VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-2	40 CFR Part 63, Subpart FFFF	No changing attributes.
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-2	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-4	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate control is not used., Control Device Type = Smokeless flare
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-5	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria and demonstrating substantially equivalent reduction efficiencies approved by the TCEQ Executive Director.
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	Flare = Operates in compliance with §63.11(b)
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-AMEL	40 CFR Part 63, Subpart FFFF	Flare = Multi-point ground flare operates in compliance with AMEL
VENT41TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-15	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream is emitted from a liquid phase slurry high-density polyethylene

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					manufacturing process., VOC Concentration = VOC concentration is greater than or equal to 408 ppmv.
VENT41TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-16	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
VENT41TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-4	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i.
VENT41TOX	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-5	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i.
VENT41VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-3	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
VENT41VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-6	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
VENT41VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-2	40 CFR Part 63, Subpart FFFF	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
40-25-6300	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
40-25-6300	EP	R5721-4	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) [G]§ 115.725(a)(4) § 115.725(a)(7) § 115.725(a)(7)(C) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(a)(7)(C) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(n) [G]§ 115.726(a)(2)
40-25-6300	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						24-hour period is exempt from §115.121(a)(1) of this title.			
40-25-6300	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
40-25-6300	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-25-6301	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§ 115.722(a) or (b) of this title than 0.5 tpy.			
40-25-6301	EP	R5721-4	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) [G]§ 115.725(a)(4) § 115.725(a)(7) § 115.725(a)(7)(C) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(a)(7)(C) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(n) [G]§ 115.726(a)(2)
40-25-6301	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
40-25-6301	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
40-25-6301	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-35-1014	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
40-35-1014	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-36-1013	EU	R7300-002	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8120(2)(A) § 117.8120(2)(B)		
40-36-1013	EU	R7300-002	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
40-36-1013	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
40-RCY-ISO	EU	R5112-AMOC	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.113 § 115.910	Alternate means of compliance with the applicable control requirements or exemption criteria in this division may be approved per 30 TAC	** See Alternative Requirement	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§115.910, if emission reductions are substantially equal.			
40-RCY-ISO	EU	60Kb-3	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(b)(1) [G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(b) and equipped with a closed vent system and control device are to meet the specifications in §60.112b(a)(3).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See CAM Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
41-25-6301	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
41-25-6301	EP	R5721-4	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) [G]§ 115.725(a)(4)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating	§ 115.725(a) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) § 115.725(a)(3)(B)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(n) [G]§ 115.726(a)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.725(a)(7) § 115.725(a)(7)(C) [G]§ 115.725(l) [G]§ 115.726(a)(2)	to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	[G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(a)(7)(C) [G]§ 115.725(l) § 115.725(n)		
41-25-6301	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
41-25-6301	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
41-25-6301	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
41-35-1114	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC)	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.		§ 115.126(3)(B)	
41-35-1114	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
41-36-1113	EU	R7300-002	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
41-36-1113	EU	R7300-002	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)		§ 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
41-36-1113	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
41-RCY-ISO	EU	R5112-AMOC	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.113 § 115.910	Alternate means of compliance with the applicable control requirements or exemption criteria in this division may be approved per 30 TAC §115.910, if emission reductions are substantially equal.	** See Alternative Requirement	None	None
41-RCY-ISO	EU	60Kb-3	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(b)(1) [G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(b) and equipped with a closed vent system and control device are to meet the specifications in §60.112b(a)(3).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 60.485(b) ** See CAM Summary		
42-05-9201	EU	R5760-296	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.767(6) § 115.764(a)(1) § 115.766(i)	All sites that are subject to this division and that are located in the Houston/ Galveston/Brazoria area as defined in § 115.10, excluding Harris County, are exempt from § 115.761(b) and (c)(2), except as provided in § 115.769(a)(3).	§ 115.764(a)(1) § 115.764(a)(3) § 115.764(c) § 115.764(d)	§ 115.766(a)(1) § 115.766(a)(2) § 115.766(a)(3) § 115.766(a)(4) § 115.766(a)(5) § 115.766(a)(6) § 115.766(c) § 115.766(d) § 115.766(i)(1)	§ 115.766(i)(2)
42-95-0421	EU	R5112-79	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
42-95-0421	EU	60Kb-32	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(B) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) [G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)		§ 60.116b(e)(1) [G]§ 60.116b(e)(3)		
42-95-0422	EU	R5112-79	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
42-95-0422	EU	60Kb-33	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
42-97-9610	CD	R1111-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period. Non-excessive upset events are subject to the provisions under	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§101.222(b).			
42-97-9610	EP	R5720-145	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) § 115.725(k)(1) [G]§ 115.725(l) § 115.725(n) ** See Alternative Requirement	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(10) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B) [G]§ 115.726(a)(2)
42-97-9610	CD	60A-HI-ST12-1	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(i)(A) § 60.18(c)(3)(i)(B) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(4) ** See Alternative Requirement	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
42-97-9610	CD	60A-HI-ST3-1	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(i)(A) § 60.18(c)(3)(i)(B) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(4) ** See Alternative Requirement	None	None
42-97-9610	CD	60A-LO-1	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
42-97-9610	CD	60A-LO-2	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
42-97-9610	CD	60A-LO-3	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(ii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
42-97-9610	CD	63A-HI-ST12-1	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(i)(A) § 63.11(b)(6)(i)(B) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) ** See Alternative Requirement	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
42-97-9610	CD	63A-HI-ST3-1	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(i)(A) § 63.11(b)(6)(i)(B) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) ** See Alternative Requirement	None	None
42-97-9610	CD	63A-LO-1	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
42-97-9610	CD	63A-LO-2	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
42-97-9610	CD	63A-LO-3	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
42-97-9620	EU	R7301-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(B)(iii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
42-97-9620	EU	R7301-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) [G]§ 117.310(a)(16)	An owner or operator may not use the alternative methods specified in	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b)	§ 117.345(a) § 117.345(f) § 117.345(f)(1)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	§§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	[G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	[G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
42-97-9620	EU	R7301-2	CO	30 TAC Chapter 117, Subchapter B	§ 117.325(a) § 117.340(f)(1)	Where a person can demonstrate that an affected unit cannot attain the carbon monoxide (CO) specifications of § 117.310(c) of this title the	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						executive director may approve emission specifications different from the CO specifications in § 117.310(c) of this title for that unit.	§ 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(B)(iii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A) ** See Alternative Requirement	§ 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
42-97-9620	EU	R7301-2	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) [G]§ 117.310(a)(16) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
42-97-9820	EU	R5131-1	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
87-97-1510	EU	R7300-1	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
87-97-1510	EU	60III-2	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
87-97-1510	EU	60III-2	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4211(c) [G]§ 60.4211(f) § 60.4218	KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.			
87-97-1510	EU	63ZZZZ-2	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
DG-01	EU	R5412-001	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F)	No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F), except as exempted in §115.411.	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a)	Pump seals within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1)	process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2)	Open-ended valves or lines within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g) § 115.789(1)(B)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(2) § 115.787(f)(3) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B)	Flanges or other connectors within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B)	Valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)				
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.787(e) § 115.787(f) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C)	Pressure relief valves (in gaseous service) within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(b)(8) § 115.781(e) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)				
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.783(4)(A)(i) § 115.783(4)(A)(ii) § 115.783(4)(A)(ii)(I) § 115.783(4)(A)(ii)(II) § 115.783(4)(B) § 115.783(4)(B)(i) § 115.783(4)(B)(ii)	Process drains within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(5) § 115.781(b)(6) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(a)	Components that contact a process fluid containing less than 5.0% highly-reactive volatile organic compounds by weight on an annual average basis are exempt from the requirements of this division (relating to Fugitive Emissions), except for 115.786(e) and (g) of this title (relating to Record keeping Requirements).	None	§ 115.786(e) § 115.786(g)	None
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolted manways, hatches, sump covers, junction box vents, and covers and seals on VOC water separators within the process unit or processes listed in §115.780(a) in which a HRVOC is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) [G]§ 115.781(d) § 115.781(g)(3)	Bypass line valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(1) § 115.783(1)(A) § 115.783(1)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(7)(B) [G]§ 115.781(d) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.786(a)(1)	§ 115.782(c)(2)(A)(ii) § 115.786(a)(1) § 115.786(a)(2) § 115.786(a)(2)(A) § 115.786(a)(2)(B) § 115.786(b)(1) § 115.786(b)(2) § 115.786(b)(2)(A) § 115.786(b)(2)(B) § 115.786(b)(2)(C) [G]§ 115.786(b)(3) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	[G]§ 115.788(g)
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1)	All agitators that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.		§ 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A)	All compressors that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c).	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.		§ 115.786(e) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i)	All pumps that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	subsection.			
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii)	Agitators within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)	defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	[G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.358(c)(1) [G]§ 115.358(h) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(2) § 115.782(b)(3) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii)	Components within the process unit or processes listed in §115.780(a) is subject to the requirements of this division. If the owner of operator elects to use the alternative work practice in §115.358 of this title, a leak is defined as specified in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f) § 115.781(b) § 115.781(b)(4) § 115.781(b)(7)	§ 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(4) § 115.356(5) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1)	[G]§ 115.358(g) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(B)(iv)		§ 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(h)(1) § 115.781(h)(2) § 115.781(h)(3) § 115.781(h)(4) § 115.781(h)(5) [G]§ 115.781(h)(6) § 115.782(b)(4) § 115.782(d)(1) § 115.788(h)(1) [G]§ 115.788(h)(2) § 115.788(h)(3)	§ 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) [G]§ 115.786(f) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(l)	Compressor seals within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)				
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(9)				
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						this title.			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	or exuding of process fluid based on sight, smell, or sound.			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355 § 115.357(1)	[G]§ 115.356(3)(C) § 115.356(5)	
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(1) § 115.357(12) § 115.357(8)	sound.			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(12) § 115.357(8) § 115.357(9)				
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-3 for compressors.	§ 60.482-3(e)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) [G]§ 60.482-2(a) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) [G]§ 60.482-1(e) § 60.486(k)	Comply with the requirements in as stated in §60.482-1(e) for equipment in VOC service < 300 hours/year.	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(6) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-10(d) § 60.482-10(m)	Comply with the requirements in as stated in §60.482-10 for flares.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) [G]§ 60.485(g)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.486(k) § 60.562-2(d) § 60.562-2(e)		§ 60.562-2(d)		
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid or heavy-liquid service.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(d) § 60.486(k) § 60.562-2(e)	Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service.	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c)	Comply with the requirements in as stated in §60.482-8 for valves in heavy-liquid service.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)				
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for flanges or other connectors.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements in as stated in §60.482-7 for valves in gas/vapor or light-liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.562-2(d) § 60.562-2(e)				
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-5 for sampling connection systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d)	Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.562-2(e)				
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for pumps in heavy-liquid service.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-10 [G]§ 60.482-10(f) [G]§ 60.482-10(g) § 60.482-10(h) § 60.482-10(i) [G]§ 60.482-10(j) [G]§ 60.482-10(k) § 60.482-10(m) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-10 for closed-vent systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.482-10(l) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(c) [G]§ 60.482-1(c) [G]§ 60.484 § 60.486(k) § 60.562-2(d)	Owner may apply to Administrator for a determination of equivalency for any emission limitation that	§ 60.562-2(d) ** See Alternative Requirement	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.562-2(e)	achieves an equivalent reduction in VOC to that of controls required in this subpart as specified.			§ 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-5 for sampling connection systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e)	Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.486(k) § 60.562-2(d) § 60.562-2(e)				
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for flanges or other connectors.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-10 [G]§ 60.482-10(f) [G]§ 60.482-10(g) § 60.482-10(h) § 60.482-10(i) [G]§ 60.482-10(j) [G]§ 60.482-10(k) § 60.482-10(m) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-10 for closed-vent systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.482-10(l) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(d) § 60.486(k) § 60.562-2(e)	Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service.	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 60.486(j) § 60.562-2(e)	§ 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid or heavy-liquid service.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) [G]§ 60.482-1(e) § 60.486(k)	Comply with the requirements in as stated in §60.482-1(e) for equipment in VOC service < 300 hours/year.	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(6) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.483-1(a) § 60.483-1(b) § 60.483-1(b)(3) § 60.483-1(c) § 60.483-1(c)(1) § 60.483-1(c)(2)	An owner or operator may elect to comply with the requirements specified in §60.483-1 and §60.483-2.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.483-1(b)(2) § 60.483-2(b)(7) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.483-2(b)(6) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) [G]§ 60.486(f) [G]§ 60.486(g)	§ 60.483-1(b)(1) § 60.483-2(a)(2) § 60.487(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.483-1(c)(3) § 60.483-1(d) § 60.483-2(a)(1) § 60.483-2(b)(1) § 60.483-2(b)(2) § 60.483-2(b)(3) § 60.483-2(b)(4) § 60.483-2(b)(5) [G]§ 60.485(h)				
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) [G]§ 60.482-2(a) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b)	Comply with the requirements as stated in §60.482-3 for compressors.	§ 60.482-3(e)(1) § 60.485(a) [G]§ 60.485(b)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)		[G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	[G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for pumps in heavy-liquid service.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	60DDD-AMEL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b)	Comply with the requirements in as stated in §60.482-8 for valves in	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	heavy-liquid service.	[G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	[G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(e) § 60.562-2(e) § 60.565(l)
FUG-01	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF
GRPEMG-ENG	EU	R7300-1	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)			
GRPEMG-ENG	EU	60IIII-1	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
GRPEMG-ENG	EU	60IIII-1	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPEMG-ENG	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
GRPEMG-ENG	EU	60III-1	PM (Opacity)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3) and §1039.105(b)(1)-(3).	None	None	[G]§ 60.4214(d)
GRPEMG-ENG	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this	None	None	§ 63.6645(c) § 63.6645(f)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.6640(f)(2)(i) § 63.6640(f)(3)	section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).			
GRPENGTK	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPVENT40 ATM	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
GRPVENT40 ATM	EP	R5721-4	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3)	All sites that are subject to this division and that are located in the Houston/Galveston/ Brazoria area as defined in	§ 115.725(a) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1)	[G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 115.725(a)(4) § 115.725(a)(7) § 115.725(a)(7)(C) [G]§ 115.725(l) [G]§ 115.726(a)(2)	§115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(a)(7)(C) [G]§ 115.725(l) § 115.725(n)	§ 115.726(j)(2)	[G]§ 115.726(a)(2)
GRPVENT40 ATM	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
GRPVENT40 ATM	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
GRPVENT40 ATM	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
GRPVENT40 ATM	EP	63FFFF-3	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(b) § 63.2455(b)(1)	For each continuous process vent, you must	§ 63.115(d) [G]§ 63.115(d)(1)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b)(2) § 63.2455(b)(3)	either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1)-(3) of this section.	§ 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) § 63.115(d)(3)(i) § 63.115(d)(3)(ii)		
GRPVENT41 ATM	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
GRPVENT41 ATM	EP	R5721-4	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) [G]§ 115.725(a)(4) § 115.725(a)(7) § 115.725(a)(7)(C) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/ Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as	§ 115.725(a) § 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(a)(7)(A) § 115.725(a)(7)(B) § 115.725(n) [G]§ 115.726(a)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a)(7)(B) § 115.725(a)(7)(C) [G]§ 115.725(l) § 115.725(n)		
GRPVENT41 ATM	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
GRPVENT41 ATM	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
GRPVENT41 ATM	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
GRPVENT41 ATM	EP	63FFFF-3	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(b) § 63.2455(b)(1) § 63.2455(b)(2) § 63.2455(b)(3)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index	§ 63.115(d) [G]§ 63.115(d)(1) § 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						value as specified in §63.115(d), except as specified in paragraphs (b)(1)-(3) of this section.	§ 63.115(d)(3)(i) § 63.115(d)(3)(ii)		
PRODDDAT M	PRO	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7)
PROUNIT40	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.2520(e)(9)
PROUNIT41	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
TK-01	EU	R5112-3	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TOX	EP	R1111-3	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	Summary		
UNLOAD1	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
UNLOAD1	EU	R5211-2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
VENT40FL	EP	R5721-2	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.722(d) § 115.722(d)(1) § 115.722(d)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/ Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
VENT40FL	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary ** See Alternative Requirement	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
VENT40FL	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.	[G]§ 115.125 § 115.126(2) ** See CAM Summary ** See Alternative Requirement	§ 115.126 § 115.126(2)	None
VENT40FL	EP	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3)		§ 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	[G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	[G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
VENT40FL	EP	63FFFF-AMEL	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii) ** See Alternative Requirement	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(iii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
VENT40TOX	EP	R5121-15	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	** See CAM Summary		
VENT40TOX	EP	R5121-16	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(A)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
VENT40TOX	EP	63FFFF-4	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(iii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		§ 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H)	§ 63.998(d)(5)	
VENT40TOX	EP	63FFFF-5	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)	through a closed-vent system to any combination of control devices (except flare).	§ 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)	§ 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	[G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
VENT40VDU	EP	R5721-3	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(3) [G]§ 115.725(b)(1) [G]§ 115.725(l)	All sites that are subject to this division and that are located in the Houston/Galveston/ Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a)(3) § 115.725(a)(3)(A) § 115.725(a)(5) § 115.725(b) [G]§ 115.725(b)(1) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(4) § 115.726(b)(5) § 115.726(b)(6) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n)
VENT40VDU	EP	R5121-6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2)	None
VENT40VDU	EP	63FFFF-2	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.995(b) § 63.995(c) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3)	§ 63.2450(q) § 63.995(b) § 63.995(c) § 63.996(b)(2) § 63.996(c)(6) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.983(d)(3) § 63.995(a)(1) § 63.995(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) [G]§ 63.997(d)		§ 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.995(b) § 63.995(c) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H)	[G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)
VENT41FL	EP	R5721-2	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.722(d) § 115.722(d)(1)	All sites that are subject to this division and that are located in the	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.722(d)(2)	Houston/Galveston/ Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).		§ 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	
VENT41FL	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary ** See Alternative Requirement	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
VENT41FL	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.	[G]§ 115.125 § 115.126(2) ** See CAM Summary ** See Alternative Requirement	§ 115.126 § 115.126(2)	None
VENT41FL	EP	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii	For each Group 1continuous process vent,	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i)	§ 63.2450(f)(2)(ii) § 63.2450(q)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3)	the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	§ 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(iii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
VENT41FL	EP	63FFFF-AMEL	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii) ** See Alternative Requirement	§ 63.998(d)(5)	
VENT41TOX	EP	R5121-15	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
VENT41TOX	EP	R5121-16	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(A)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
VENT41TOX	EP	63FFFF-4	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		[G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§	[G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							63.997(e)(2)(iv)(H)		
VENT41TOX	EP	63FFFF-5	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) § 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(iii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)		
VENT41VDU		R5721-3	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(3) [G]§ 115.725(b)(1) [G]§ 115.725(l)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a)(3) § 115.725(a)(3)(A) § 115.725(a)(5) § 115.725(b) [G]§ 115.725(b)(1) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(4) § 115.726(b)(5) § 115.726(b)(6) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n)
VENT41VDU	EP	R5121-6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2)	None
VENT41VDU	EP	63FFFF-2	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b)	§ 63.2450(q) § 63.995(b) § 63.995(c) § 63.996(b)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.995(a)(1) § 63.995(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) [G]§ 63.997(d)	organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	§ 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.995(b) § 63.995(c) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D)	[G]§ 63.983(d)(2) § 63.995(b) § 63.995(c) § 63.996(c)(2)(iii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.996(c)(6) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H)		

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: 40-RCY-ISO	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-3
Pollutant: VOC	Main Standard: § 60.112b(b)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
<p>Deviation Limit: If monitoring devices indicate absence of a pilot flame, visually confirm pilot flame using camera feed in the control room. A deviation should be considered if absence of a pilot flame is indicated by monitoring devices and visual indication.</p> <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame.</p> <p>Maintain records of events when pilot flame is absent and duration of events.</p> <p>Each monitoring device shall be accurate to within manufacturer's recommendations.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: 41-RCY-ISO	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-3
Pollutant: VOC	Main Standard: § 60.112b(b)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
<p>Deviation Limit: If monitoring devices indicate absence of a pilot flame, visually confirm pilot flame using camera feed in the control room. A deviation should be considered if absence of a pilot flame is indicated by monitoring devices and visual indication.</p> <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame.</p> <p>Maintain records of events when pilot flame is absent and duration of events.</p> <p>Each monitoring device shall be accurate to within manufacturer's recommendations.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-4
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: If monitoring devices indicate absence of a pilot flame, visually confirm pilot flame using camera feed in the control room. A deviation should be considered if absence of a pilot flame is indicated by monitoring devices and visual indication.	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame.</p> <p>Maintain records of events when pilot flame is absent and duration of events.</p> <p>Each monitoring device shall be accurate to within manufacturer's recommendations.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-5
Pollutant: VOC	Main Standard: § 115.123(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: If monitoring devices indicate absence of a pilot flame, visually confirm pilot flame using camera feed in the control room. A deviation should be considered if absence of a pilot flame is indicated by monitoring devices and visual indication.	
CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame.	
Maintain records of events when pilot flame is absent and duration of events.	
Each monitoring device shall be accurate to within manufacturer's recommendations.	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40TOX	
Control Device ID No.: TOX	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-15
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1300°F	
<p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. 	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40TOX	
Control Device ID No.: TOX	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-16
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1300°F	
<p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. 	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40VDU	
Control Device ID No.: 42-97-9620	Control Device Type: Vapor combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-6
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: At all times waste gas is directed to the VDU, as indicated by the flow monitor	
Averaging Period: N/A	
Deviation Limit: No Pilot Flame	
<p>CAM Text: Calibrated to or have a calibration check per manufacturer's specifications</p> <p>The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor</p> <p>Retain records of date, time and duration of waste gas vent stream flow. Time, date, and duration of any loss of pilot flame while waste gas is directed to the VDU shall be recorded.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-4
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: If monitoring devices indicate absence of a pilot flame, visually confirm pilot flame using camera feed in the control room. A deviation should be considered if absence of a pilot flame is indicated by monitoring devices and visual indication.	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame.</p> <p>Maintain records of events when pilot flame is absent and duration of events.</p> <p>Each monitoring device shall be accurate to within manufacturer's recommendations.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-5
Pollutant: VOC	Main Standard: § 115.123(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
<p>Deviation Limit: If monitoring devices indicate absence of a pilot flame, visually confirm pilot flame using camera feed in the control room. A deviation should be considered if absence of a pilot flame is indicated by monitoring devices and visual indication.</p> <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame.</p> <p>Maintain records of events when pilot flame is absent and duration of events.</p> <p>Each monitoring device shall be accurate to within manufacturer's recommendations.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41TOX	
Control Device ID No.: TOX	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-15
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1300°F	
<p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. 	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41TOX	
Control Device ID No.: TOX	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-16
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1300°F	
<p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. 	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41VDU	
Control Device ID No.: 42-97-9620	Control Device Type: Vapor combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-6
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: At all times waste gas is directed to the VDU, as indicated by the flow monitor	
Averaging Period: N/A	
Deviation Limit: No Pilot Flame	
<p>CAM Text: Calibrated to or have a calibration check per manufacturer's specifications</p> <p>The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor</p> <p>Retain records of date, time and duration of waste gas vent stream flow. Time, date, and duration of any loss of pilot flame while waste gas is directed to the VDU shall be recorded.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: DG-01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-001
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: Cover shall be kept closed whenever cleaner is not in use, and any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: TOX	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-3
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: If visible emissions are observed, it should be considered and reported as a deviation.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p>	

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
40-35-1014	N/A	30 TAC Chapter 115, HRVOC Vent Gas	Vent stream does not emit highly reactive volatile organic compounds.
40-35-1014	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of transfer rack; does not fill tank trucks and/or rail cars with organic liquids that contain one or more HAPs.
41-35-1114	N/A	30 TAC Chapter 115, HRVOC Vent Gas	Vent stream does not emit highly reactive volatile organic compounds.
41-35-1114	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of continuous process vent for purposes of 40 CFR 63 Subpart FFFF applicability; does not emit organic HAPs
42-05-9201	N/A	40 CFR Part 63, Subpart FFFF	MACT FFFF heat exchange system requirements do not apply because unit meets the condition in §63.104(a)(5): the recirculating heat exchange system is used to cool process fluids that contain less than 5% by weight of total hazardous air pollutants
42-05-9201	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not used compounds containing chromium on or after September 8, 1994.
42-95-0421	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of storage tank in MACT FFFF; stores organic liquids that contain HAPs only as impurities.
42-95-0422	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of storage tank in MACT FFFF; stores organic liquids that contain HAPs only as impurities.
42-97-9820	N/A	40 CFR Part 63, Subpart FFFF	Wastewater stream does not meet the definition of process wastewater in Subpart F and in

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			§63.2485(b)-not Group 1 wastewater.
FUG-01	N/A	40 CFR Part 60, Subpart VVa	Not an affected facility in the synthetic organic manufacturing industry; does not produce, as intermediate or final product, one of the chemicals listed in §60.489.
DG-01	N/A	40 CFR Part 63, Subpart T	Cold solvent cleaner does not use halogenated HAP solvents.
GRPENGTK	EMG-ENGTK1, EMG-ENGTK2, EMG-ENGTK3, FWP-TK1	40 CFR Part 60, Subpart Kb	Tank is less than 10,600 gallons.
GRPVENT40ATM	40-35-6106, 40-35-6201, 40-35-6310, 40-35-8011, 40-35-8021, 40-35-80LO	40 CFR Part 60, Subpart NNN	Not part of a process unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product or intermediate.
GRPVENT40ATM	40-35-6106, 40-35-6201, 40-35-6310, 40-35-8011, 40-35-8021, 40-35-80LO	40 CFR Part 60, Subpart RRR	Not part of a process unit that produces any of the chemicals listed in §60.707 as a product, co-product, by-product or intermediate.
GRPVENT41ATM	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	40 CFR Part 60, Subpart NNN	Not part of a process unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product or intermediate.
GRPVENT41ATM	41-35-6106, 41-35-6201, 41-35-6310, 41-35-8011, 41-35-8021, 41-35-80LO	40 CFR Part 60, Subpart RRR	Not part of a process unit that produces any of the chemicals listed in §60.707 as a product, co-product, by-product or intermediate.
GRPVENTNOVOC	40-35-3102, 40-35-6105, 40-35-6181, 40-35-6191, 40-35-61AF, 40-35-6401, 40-35-6500, 40-35-6501, 40-35-8103, 40-35-8120, 40-35-8130, 41-35-3102, 41-35-6105, 41-35-61AD, 41-35-6401, 87-35-3120	30 TAC Chapter 115, Vent Gas Controls	Vent stream does not emit volatile organic compounds.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
GRPVENTNOVOC	40-35-3102, 40-35-6105, 40-35-6181, 40-35-6191, 40-35-61AF, 40-35-6401, 40-35-6500, 40-35-6501, 40-35-8103, 40-35-8120, 40-35-8130, 41-35-3102, 41-35-6105, 41-35-61AD, 41-35-6401, 87-35-3120	40 CFR Part 63, Subpart FFFF	Does not meet the definition of continuous process vent for purposes of 40 CFR 63, Subpart FFFF applicability; does not emit HAPs.
PEGASTK	N/A	30 TAC Chapter 115, Storage of VOCs	Storage vessel has a capacity less than 1,000 gallons.
PEGASTK	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity less than 75 meters cubed (19,800 gallons).
PROUNIT40	N/A	30 TAC Chapter 115, Industrial Wastewater	Not an affected VOC wastewater stream; VOC concentration less than 1000 ppmw.
PROUNIT41	N/A	30 TAC Chapter 115, Industrial Wastewater	Not an affected VOC wastewater stream; VOC concentration less than 1000 ppmw.
TK-01	N/A	40 CFR Part 60, Subpart Kb	Tank between 20,000 and 40,000 gallons storing VOL with a vapor pressure less than 2.2 psia.
UNLOAD1	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of transfer rack; does not fill tank trucks and/or rail cars with organic liquids that contain one or more HAPs.

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit	137

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: GHGPSDTX196M1	Issuance Date: 10/15/2021
PSD Permit No.: PSDTX1566M1	Issuance Date: 10/15/2021
Nonattainment (NA) Permits	
NA Permit No.: N166M4	Issuance Date: 10/15/2021
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 103832	Issuance Date: 10/15/2021
Authorization No.: 155893	Issuance Date: 04/03/2019
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.393	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.478	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
40-25-6300	UNIT 40 PELLET DEWATERING DRYER	103832, PSDTX1566M1, N166M4
40-25-6301	UNIT 40 PELLET DEWATERING DRYER	103832, PSDTX1566M1, N166M4
40-35-1014	UNIT 40 HEPA ACTIVATOR FILTER A/B	103832, PSDTX1566M1, N166M4
40-35-3102	UNIT 40 S-1 CATALYST CHARGE PURGE FILTER	103832, PSDTX1566M1, N166M4
40-35-6105	UNIT 40 ADDITIVE BAG DISCHARGE FILTER	103832, PSDTX1566M1, N166M4
40-35-6106	UNIT 40 EXTRUDER FEED HOPPER VENT & BYPASS FILTERS	103832, PSDTX1566M1, N166M4
40-35-6181	UNIT 40 TALC ADDITIVE RECEIVER FILTER	103832, PSDTX1566M1, N166M4
40-35-6191	UNIT 40 SLIP ADDITIVE RECEIVER FILTER	103832, PSDTX1566M1, N166M4
40-35-61AF	UNIT 40 ADDITIVE HOPER FILTERS A, B, C, D, E, F	103832, PSDTX1566M1, N166M4
40-35-6201	UNIT 40 EXTRUDER FEED HOPPER VENT & BYPASS FILTERS	103832, PSDTX1566M1, N166M4
40-35-6310	UNIT 40 PELLET SURGE HOPER FILTER	103832, PSDTX1566M1, N166M4
40-35-6401	UNIT 40 CENTRAL VACUUM SECONDARY FILTER	103832, PSDTX1566M1, N166M4
40-35-6500	UNIT 40 TALC VENT FILTER	103832, PSDTX1566M1, N166M4
40-35-6501	UNIT 40 SLIP VENT FILTER	103832, PSDTX1566M1, N166M4
40-35-8011	UNIT 40 LOADOUT STORAGE AND OFF-SPECSILO FILTERS	103832, PSDTX1566M1, N166M4
40-35-8021	UNIT 40 LOADOUT STORAGE AND OFF-SPECSILO FILTERS	103832, PSDTX1566M1, N166M4
40-35-80LO	UNIT 40 LOADOUT FILTER	103832, PSDTX1566M1, N166M4
40-35-8103	UNIT 40 BLOWER GUARD FILTER	103832, PSDTX1566M1, N166M4
40-35-8120	UNIT 40 TALC ADDITIVE SILO VENT FILTER	103832, PSDTX1566M1, N166M4
40-35-8130	UNIT 40 SLIP ADDITIVE SILO VENT FILTER	103832, PSDTX1566M1, N166M4

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
40-36-1013	UNIT 40 CATALYST ACTIVATOR HEATER	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
40-RCY-ISO	UNIT 40 RECYCLED ISOBUTANE TANK	103832, PSDTX1566M1, N166M4
41-25-6301	UNIT 41 PELLET DEWATERING DRYER	103832, PSDTX1566M1, N166M4
41-35-1114	UNIT 41 HEPA ACTIVATOR FILTER A/B	103832, PSDTX1566M1, N166M4
41-35-3102	PF CATALYST CHARGE PURGE FILTER	103832, PSDTX1566M1, N166M4
41-35-6105	UNIT 41 ADDITIVE BAG DISCHARGE FILTER	103832, PSDTX1566M1, N166M4
41-35-6106	UNIT 41 EXTRUDER FEED HOPPER VENT & BYPASS FILTER	103832, PSDTX1566M1, N166M4
41-35-61AD	UNIT 41 ADDITIVE HOPPER FILTERS A, B, C, D	103832, PSDTX1566M1, N166M4
41-35-6201	UNIT 41 EXTRUDER FEED HOPPER VENT & BYPASS FILTER	103832, PSDTX1566M1, N166M4
41-35-6310	UNIT 41 PELLET SURGE HOPPER FILTER	103832, PSDTX1566M1, N166M4
41-35-6401	UNIT 41 CENTRAL VACUUM SECONDARY FILTER	103832, PSDTX1566M1, N166M4
41-35-8011	UNIT 41 PELLET SILO VENT FILTER	103832, PSDTX1566M1, N166M4
41-35-8021	UNIT 41 PELLET SILO VENT FILTER	103832, PSDTX1566M1, N166M4
41-35-80LO	UNIT 41 LOADOUT FILTER	103832, PSDTX1566M1, N166M4
41-36-1113	UNIT 41 CATALYST ACTIVATOR HEATER	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
41-RCY-ISO	UNIT 41 RECYCLED ISOBUTANE TANK	103832, PSDTX1566M1, N166M4
42-05-9201	COOLING TOWER	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
42-95-0421	FRESH 1-HEXENE TANK	103832, PSDTX1566M1, N166M4
42-95-0422	FRESH 1-HEXENE TANK	103832, PSDTX1566M1, N166M4

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
42-97-9610	MULTI-POINT GROUND FLARE	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
42-97-9620	VAPOR DESTRUCTION UNIT	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
42-97-9820	WASTEWATER (API SEPARATOR)	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
87-35-3120	SIT DEHEELING DUST FILTER	103832, PSDTX1566M1, N166M4
87-97-1510	FIRE WATER PUMP ENGINE	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
DG-01	DEGREASER 1	106.454/11/01/2001
EMG-ENG1	EMERGENCY GENERATOR ENGINE	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
EMG-ENG2	EMERGENCY GENERATOR ENGINE	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
EMG-ENG3	EMERGENCY GENERATOR ENGINE	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4
EMG-ENGTK1	DIESEL TANK	103832, PSDTX1566M1, N166M4
EMG-ENGTK2	DIESEL TANK	103832, PSDTX1566M1, N166M4
EMG-ENGTK3	DIESEL TANK	103832, PSDTX1566M1, N166M4
FUG-01	FUGITIVE EMISSIONS	103832, GHGPSDTX196M1, PSDTX1566M1, N166M4, 106.261/11/01/2003 [160795, 164585]
FWP-TK1	DIESEL TANK	103832, PSDTX1566M1, N166M4
PEGASTK	PE GASOLINE TANK	106.478/09/04/2000
PRODDATM	POLYMER PROCESS UNIT 40 AND 41 VENTS TO ATMOSPHERE	103832, PSDTX1566M1, N166M4

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
PROUNIT40	POLYMER PROCESS UNIT 40	103832, PSDTX1566M1, N166M4
PROUNIT41	POLYMER PROCESS UNIT 41	103832, PSDTX1566M1, N166M4
TK-01	LOCOMOTIVE ENGINE TANK	103832, PSDTX1566M1, N166M4
TOX	THERMAL OXIDIZER	103832, 155893, GHGPSDTX196M1, PSDTX1566M1, N166M4
UNLOAD1	UNLOADING OPERATION	103832, PSDTX1566M1, N166M4
VENT40FL	UNIT 40 VENTS TO FLARE	103832, PSDTX1566M1, N166M4
VENT40TOX	UNIT 40 VENTS TO THERMAL OXIDIZER	103832, 155893, PSDTX1566M1, N166M4
VENT40VDU	UNIT 40 VENTS TO VDU	103832, PSDTX1566M1, N166M4
VENT41FL	UNIT 41 VENTS TO FLARE	103832, PSDTX1566M1, N166M4
VENT41TOX	UNIT 41 VENTS TO THERMAL OXIDIZER	103832, 155893, PSDTX1566M1, N166M4
VENT41VDU	UNIT 41 VENTS TO VDU	103832, PSDTX1566M1, N166M4

**This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers, Minor NSR permit numbers, and Major NSR permit numbers.

Alternative Requirement

Alternative Requirement..... 142

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



Alternative Method of Control (AMOC) Plan

AMOC No.: AMOC-31

Chevron Phillips Chemical Company, L.P.

Polyethylene Plant Multi-Point Ground Flare (MPGF) System

Sweeney, Brazoria County

Regulated Entity Number: RN100825249

- A. This AMOC Plan Authorization shall apply at the Chevron Phillips Chemical Company, L.P. (CPCHEM) for polyethylene production at the Old Ocean plant located near Sweeney, Brazoria County identified by Regulated Entity Number RN100825249 under Title 30 Texas Administrative Code Section 115.910 (30 TAC § 115.910) for the high pressure stages of a multi-point ground flare (MPGF) system for use during high-pressure emission events such as planned maintenance, start-ups and shut-downs (MSS) as well as unplanned emergency and upset situations.
- B. A copy of the AMOC application and the AMOC Plan provisions must be kept on-site or at a centralized location and made available at the request of personnel from the TCEQ or any pollution control agency with jurisdiction. The AMOC application is defined by the application received October 1, 2015 and supporting documentation submitted through January 13, 2017.
- C. This authorization is granted under § 115.910 for emissions sources regulated by 30 TAC Chapter 115, Subchapter B: General Volatile Organic Compound Sources, Division 2: Vent Gas Control and Subchapter H: Highly Reactive Volatile Organic Compounds, Division 1: Vent Gas Control. This AMOC shall apply in lieu of the requirements of 30 TAC §§ 115.122(a) and 115.722(d), as applicable. Compliance with this AMOC is independent of CPCHEM's obligation to comply with all other applicable requirements of 30 TAC Chapter 115, TCEQ permits and applicable state and federal law. The monitoring and testing requirements of 30 TAC §§ 115.125 and 115.725 shall continue to apply even though the flare is no longer subject to 30 TAC §§ 115.122(a) and 115.722(d).
- Compliance with the requirements of this plan does not assure compliance with requirements of an applicable New Source Performance Standard, an applicable National Emission Standard for Hazardous Air Pollutants or an Alternative Means of Emission Limitation and does not constitute approval of alternative standards for these regulations.
- D. In accordance with 30 TAC § 115.913(c), all representations submitted for this plan, as well as the provisions listed here, become conditions upon which this AMOC Plan is issued. It is unlawful to vary from the emission limits, control requirements, monitoring, testing, reporting or recordkeeping requirements of this Plan.

- E. The high pressure stages of the MPGF system identified as EPN 42-97-9610 in Permit Nos. 103832 and N166 are subject to this AMOC plan. The system collects and combusts hydrocarbon streams during high pressure MSS activities and emergencies. Operations of the pressure-assisted MPGF will achieve a reduction in emissions at least equivalent to the reduction in emissions being controlled by a steam-assisted, air-assisted, or non-assisted flare complying with the requirements of §115.122(a), §115.722(d), 40 CFR 63.11(b), or 40 CFR 60.18(b).
- F. The high pressure MPGF system stages must be designed and operated such that the following are met:
1. Operating Requirements: For Stages 1 and 2: the net heating value of the flare vent gas combustion zone (NHV_{cz}) is greater than or equal to 600 British thermal units per standard cubic foot (Btu/scf); or the combustion zone gas lower flammability limit (LFL_{cz}) is less than or equal to 8.0 percent by volume.

For Stages 3 through 10: the NHV_{cz} is greater than or equal to 800 Btu/scf; or the LFL_{cz} is less than or equal to 6.5 percent by volume.

The owner or operator must demonstrate compliance with the NHV_{cz} or LFL_{cz} metric by continuously complying with a 15-minute block average. The operator must calculate and monitor for the NHV_{cz} or LFL_{cz} according to the following:

a. Calculation of NHV_{cz}

- i. The owner or operator shall determine the net heating value using the following equation:

$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i$$

Where:

NHV_{vg} = Net heating value of flare vent gas, British thermal units per standard cubic foot (Btu/scf).

Flare vent gas means all gas found just prior to the MPGF. This gas includes all flare waste gas (i.e., gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

i = Individual component in flare vent gas.

n = Number of components in flare vent gas.

x_i = Concentration of component i in flare vent gas, volume percent (vol %).

NHV_i = Net heating value of component i determined as the heat of combustion where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius (°C) and 1 atmosphere (or constant pressure) with water in the gaseous state from values published in the literature, and then the values converted to a volumetric basis using 20 °C for "standard temperature." Table 1 (Appendix) summarizes component properties including net heating values.

- ii. For MPGF Stages 3 -10, $NHV_{vg} = NHV_{cz}$.

- iii. For MPGF Stages 1 - 2, $NHV_{cz} = \frac{Q_{vg} \times NHV_{vg}}{(Q_{vg} + Q_s)}$

Where:

NHV_{cz} = Net heating value of flare vent gas (Btu/scf).

NHV_{vg} = Net heating value of flare vent gas, Btu/scf for the 15-minute block period as determined according to (1)(a)(i) above.

Q_{vg} = Cumulative volumetric flow of flare gas vent in scf during the 15-minute block period.

Q_s = Cumulative volumetric flow of total assist steam in scf during the 15-minute block period.

b. Calculation of LFL_{cz}

- i. The owner or operator shall determine LFL_{cz} from compositional analysis data by using the following equation:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left[\frac{x_i}{LFL_i} \right]} * 100 \%$$

Where:

LFL_{vg} = Lower flammability limit of flare vent gas, volume percent (vol %)

n = Number of components in the vent gas.

i = Individual component in the vent gas.

x_i = Concentration of component i in the vent gas, vol %.

LFL_i = Lower flammability limit of component i as determined using values published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite LFL (e.g., $LFL_{N_2} = \infty$, so that $c_{N_2} / LFL_{N_2} = 0$). LFL values for common flare vent gas components are provided in Table 1 (Appendix).

- ii. For MPGF Stages 3 - 10, $LFL_{vg} = LFL_{cz}$.
- iii. For MPGF Stages 1 - 2, LFL_{cz} shall be calculated using the following equation:

$$LFL_{cz} = \frac{LFL_{vg} \times (Q_{vg} + Q_s)}{Q_{vg}}$$

Where:

LFL_{cz} = Lower flammability limit of combustion zone gas (vol %).

LFL_{vg} = Lower flammability limit of flare vent gas (vol %)

Q_{vg} = Cumulative volumetric flow of flare gas vent in scf during the 15-minute block period.

Q_s = Cumulative volumetric flow of total assist steam in scf during the 15-minute block period.

- c. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring flare vent gas volumetric flow rate (Q_{vg}) and the total assist steam volumetric flow rate (Q_s).
 - i. The flow rate monitoring system must be able to correct for the temperature and pressure of the system and output parameters in standard conditions (i.e., a temperature of 20 degrees C (68 ° F) and a pressure of 1 atmosphere).
 - ii. Mass flow monitors may be used for determining volumetric flow rate of flare vent gas provided the molecular weight of the flare vent gas is determined using compositional analysis so that the mass flow rate can be converted to volumetric flow at standard conditions using the following equation:

$$Q_{vol} = \frac{Q_{mass} \times 385.3}{MW_t}$$

Where:

Q_{vol} = volumetric flow rate in scf per second (scf/s).

Q_{mass} = mass flow rate in pounds per second (lb/s)

385.3 = conversion factor scf per pound-mole

MW_t = molecular weight of the gas at the flow monitoring location, pounds per pound-mole

- iii. Mass flow monitors may be used for determining volumetric flow rate of total assist steam. Use the equation in (1)(c)(ii) to convert mass flow rates to volumetric flow rates. Use a molecular weight of 18 pounds per pound-mole for total assist steam.
 - d. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15-minutes), temperature consistent with the applicable requirements in 30 TAC §115 for purposes of correcting flow rate to standard conditions. The monitor must meet the accuracy and calibration specifications annually.
 - e. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15-minutes), calculating, and recording the individual component concentrations present in the flare vent gas or install, operate, calibrate and maintain a monitoring system capable of continuously measuring, calculating and recording NHV_{vg} (in Btu/scf).
 - f. For each measurement produced by the monitoring system, the operator shall determine the 15-minute block average as the arithmetic average of all measurements made by the monitoring system within the 15-minute period.
 - g. The operator must follow the calibration and maintenance procedures according to Table 2 (Appendix). Monitor downtime associated with maintenance periods, instrument adjustments or checks to maintain precision and accuracy. Zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material. Calibration and maintenance procedures conducted when the flare is not receiving regulated material are excluded from the monitor downtime calculation.
2. Pilot Flame Requirements: The MPGF system shall be operated with a flame present at all times when in use. Each burner on MPGF Stages 1 and 2 must have a pilot with a continuously lit pilot flame. Each of Stages 3 - 10 burners must be equipped with at least two pilots with a continuously lit pilot flame.

The pilot flame(s) must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame. The time, date and duration of any complete loss of pilot flame on any of the individual burners of Stages 1 and 2, or on Stages 3 -10 burners, must be recorded. Each monitoring device must be maintained or replaced at a frequency in accordance with the manufacturer's specifications.

3. Visible Emission Requirements: When the flare is receiving regulated material, the MPGF system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. A video camera that is capable of continuously recording (i.e., at least one frame every 15 seconds with time and date stamps) images of the flare flame and a

reasonable distance above the flare flame at an angle suitable for visible emissions observations must be used to demonstrate compliance with this requirement. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the video camera images may be viewed at any time.

4. Monitor Requirements: The operator of a MPGF system shall install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system for each staging valve to ensure that the MPGF operates within the range of tested conditions or within the range of the manufacturer's specifications. The pressure monitor shall meet the requirements in Table 2 (Appendix).

Monitor downtime associated with maintenance periods, instrument adjustments or checks to maintain precision and accuracy and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material. Calibration and maintenance procedures conducted when the flare is not receiving regulated material are excluded from the monitor downtime calculation.

5. Recordkeeping Requirements: All data must be recorded and maintained for a minimum of five years or for as long as applicable rule subpart(s) specify flare records should be kept, whichever is longer. Records must be maintained onsite and made available upon request by authorized representatives of the executive director, U.S. EPA, and any local air pollution control agency with jurisdiction.

6. Reporting Requirements

- a. The information specified in (b) and (c) below should be reported in the timeline specified by the applicable rules for which the MPGF will control emissions.
- b. Owners or operators should include the following information in their initial Monitoring Plan:
 - i. Specify flare design as a pressure assisted MPGF with clear notations that Stages 1 and 2 are steam-assisted.
 - ii. All visible emission readings, *NHVCz* and/or *LFLCz* determinations, and flow rate measurements. For MPGF, exit velocity determinations do not need to be reported.
 - iii. All periods during the compliance determination when a complete loss of pilot flame on any stage of MPGF burners occurs and for Stages 1 and 2 all periods when a complete loss of pilot flare on an individual burner occurs.
 - iv. All periods during the compliance determination when the pressure monitor(s) on the main flare header show the MPGF burners operating outside the range of tested conditions or outside the range of the manufacturer's specifications.
 - v. All periods during the compliance determination when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation, but is; or when a stage of the MPGF should be in operation, but is not.

- c. The owner or operator shall notify the executive director of periods of excess emissions in their Title V Periodic Reports. These periods of excess emissions shall include:
- i. Each 15-minute block during which there was at least one minute when regulated material was routed to the MPGF and a complete loss of pilot flame on Stages 3 - 10 occurred or a complete loss of pilot flame on any individual burner on Stages 1 and 2 occurred.
 - ii. Periods of visible emissions events that are time and date stamped and exceed more than 5 minutes in any 2 hour consecutive period.
 - iii. Each 15-minute block period for which an applicable combustion zone operating limit (*i.e.*, *NHVcz* or *LFLcz*) is not met for the MPGF when regulated material is being combusted in the flare. Indicate the date and time for each period, the *NHVcz* and/or *LFLcz* operating parameter for the period, the type of monitoring system used to determine compliance with the operating parameters (*e.g.*, gas chromatograph or calorimeter), and the MPGF stages which were in use.
 - iv. Periods when the pressure monitor(s) on the main flare header show the MPGF burners are operating outside the range of tested conditions or outside the range of the manufacturer's specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of MPGF burners affected and the range of tested conditions or manufacturer's specifications.
 - v. Periods when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation, but is; or when a stage of the MPGF should be in operation, but is not. Indicate the date and time for each period, whether the stage was supposed to be open but was closed or vice versa and the stage(s) and number of MPGF burners affected.

APPENDIX Table 1 — Individual Component Properties

Component	Molecular Formula	MWl (lb/ lb mol)	NHVi (Btu/scf)	LFLi (volume %)
Acetylene	C2H2	26.04	1,404	2.5
Benzene	C6H6	78.11	3,591	1.3
1,2- Butadiene	C4H6	54.09	2,794	2.0
1,3- Butadiene	C4H6	54.09	2,690	2.0
iso-Butane	C4H10	58.12	2,957	1.8
n-Butane	C4H10	58.12	2,968	1.8
cis-Butene	C4H8	56.11	2,830	1.6
iso-Butene	C4H8	56.11	2,928	1.8
trans-Butene	C4H8	56.11	2,826	1.7
Carbon Dioxide	CO2	44.01	0	∞
Carbon Monoxide	CO	28.01	316	12.5
Cyclopropane	C3H6	42.08	2,185	2.4
Ethane	C2H6	30.07	1,595	3.0
Ethylene	C2H4	28.05	1,477	2.7
Hydrogen	H2	2.02	274	4.0
Hydrogen Sulfide	H2S	34.08	587	4.0
Methane	CH4	16.04	896	5.0
MethylAcetylene	C3H4	40.06	2,088	1.7
Nitrogen	N2	28.01	0	∞
Oxygen	O2	32.00	0	∞
Pentane+ (C5+)	C5H12	72.15	3,655	1.4
Propadiene	C3H4	40.06	2,066	2.16
Propane	C3H8	44.10	2,281	2.1
Propylene	C3H6	42.08	2,150	2.4
Water	H2O	18.02	0	∞

APPENDIX Table 2 — Accuracy and Calibration Requirements

Parameter	Accuracy requirements	Calibration requirements
Flare Vent Gas Flow Rate	<p>±20 percent of flow rate at velocities ranging from 0.1 to 1 foot per second.</p> <p>±5 percent of flow rate at velocities greater than 1 foot per second.</p>	<p>Performance evaluation biennially (every two years) and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale.</p> <p>Checks of all mechanical connections for leakage monthly. Visual inspections and checks of system operation every 3 months, unless the system has a redundant flow sensor.</p> <p>Select a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.</p>
Pressure	<p>±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.</p>	<p>Review pressure sensor readings at least once a week for straight-line (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated.</p> <p>Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation and galvanic corrosion every 3 months, unless the system has a redundant pressure sensor.</p> <p>Select a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.</p>
Net Heating Value by Calorimeter	<p>±2 percent of span</p>	<p>Calibration requirements should follow manufacturer's recommendations at a minimum.</p> <p>Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation.</p> <p>Where feasible, select a sampling location at least two equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air in leakages, or other point at which a change in the pollutant concentration or emission rate occurs.</p>
Net Heating Value by Gas Chromatograph	<p>As specified in Performance Specification 9 of 40 CFR part 60 Appendix B.</p>	<p>Follow the procedure in Performance Specification 9 of 40 CFR Part 60 Appendix B, except that a single daily mid-level calibration check can be used, a triplicate mid-level check weekly, and the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).</p>

APPENDIX 3 — Acronyms and Abbreviations

The AMOC uses multiple acronyms and terms, defined here (please note this list is not exhaustive):

AMEL	alternative means of emission limitation
AMOC	Alternate Method of Compliance or Control
Btu/scf	British thermal units per standard cubic foot
CAA	Clean Air Act
CBI	confidential business information
CFR	Code of Federal Regulations
CPCHEM	Chevron Phillips Chemical Company LP
EPA	Environmental Protection Agency
EPN	Emission Point Number
Eqn	equation
HAP	hazardous air pollutants
HP	high pressure
LFL	lower flammability limit
<i>LFLcz</i>	lower flammability limit of combustion zone gas
<i>LFLvg</i>	lower flammability limit of flare vent gas
MPGF	multi-point ground flares
MSS	planned maintenance, start-ups and shut-downs
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHV	net heating value
<i>NHVcz</i>	net heating value of combustion zone gas
<i>NHVvg</i>	net heating value of flare vent gas
NSPS	New Source Performance Standards
OAQPS	Office of Air Quality Planning and Standards
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
scf	standard cubic feet
VOC	volatile organic compounds



Ford: <https://www.epa.gov/vehicle-and-engine-certification/ford-compliance-materials-light-duty-greenhouse-gas-ghg-standards>

Hyundai: <https://www.epa.gov/vehicle-and-engine-certification/hyundai-compliance-materials-light-duty-greenhouse-gas-ghg-standards>

EPA is providing a 30-day comment period on the applications for off-cycle credits described in this action, as specified by the regulations. The manufacturers may submit a written rebuttal of comments for EPA's consideration, or may revise an application in response to comments. After reviewing any public comments and any rebuttal of comments submitted by manufacturers, EPA will make a final decision regarding the credit requests. EPA will make its decision available to the public by placing a decision document (or multiple decision documents) in the docket and on EPA's Web site at the same manufacturer-specific pages shown previously. While the broad methodologies used by these manufacturers could potentially be used for other vehicles and by other manufacturers, the vehicle specific data needed to demonstrate the off-cycle emissions reductions would likely be different. In such cases, a new application would be required, including an opportunity for public comment.

Dated: May 16, 2017.

Byron J. Bunker,
Director, Compliance Division, Office of
Transportation and Air Quality, Office of Air
and Radiation.

[FR Doc. 2017-12737 Filed 6-16-17; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2014-0738; FRL-9963-44-
OAR]

Notice of Final Approval for an Alternative Means of Emission Limitation at Chevron Phillips Chemical Company LP

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Notice; final approval.

SUMMARY: This notice announces our approval of the Alternative Means of Emission Limitation (AMEL) request from Chevron Phillips Chemical Company LP (CP Chem) under the Clean Air Act (CAA) to operate a multi-point ground flare (MPGF) at their ethylene plant in Baytown, Texas, and to operate an MPGF at their polyethylene plant in

Old Ocean, Texas. This approval notice specifies the operating conditions and monitoring, recordkeeping, and reporting requirements that these facilities must follow to demonstrate compliance with the approved AMEL.

DATES: The approval of the AMEL request for the MPGF at CP Chem's ethylene plant in Baytown, Texas, and the MPGF at CP Chem's polyethylene plant in Old Ocean, Texas, is effective on June 19, 2017.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2014-0738. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov>, or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Mr. Andrew Bouchard, Sector Policies and Programs Division (E143-01), Office of Air Quality Planning and Standards (OAQPS), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-4036; fax number: (919) 541-3470; and email address: bouchard.andrew@epa.gov.

SUPPLEMENTARY INFORMATION:

Acronyms and Abbreviations. We use multiple acronyms and terms in this notice. While this list may not be exhaustive, to ease the reading of this notice and for reference purposes, the EPA defines the following terms and acronyms here:

AMEL alternative means of emission limitation
Btu/scf British thermal units per standard cubic foot
CAA Clean Air Act
CBI confidential business information
CFR Code of Federal Regulations
CP Chem Chevron Phillips Chemical

Company LP
EPA Environmental Protection Agency
Eqn equation
HAP hazardous air pollutants
HP high pressure
LFL lower flammability limit
LFL_{ex} lower flammability limit of combustion zone gas
LFL_{vg} lower flammability limit of flare vent gas
MPGF multi-point ground flare
NESHAP national emission standards for hazardous air pollutants
NHV net heating value
NHV_{ex} net heating value of combustion zone gas
NHV_{vg} net heating value of flare vent gas
NSPS new source performance standards
OAQPS Office of Air Quality Planning and Standards
scf standard cubic feet
VOC volatile organic compounds

Organization of This Document. The information in this notice is organized as follows:

- I. Background
 - A. Summary
 - B. Regulatory Flare Requirements and CP Chem's AMEL Request
- II. Summary of Public Comments on CP Chem's AMEL Request
- III. Final Notice of Approval of CP Chem's AMEL Request and Required Operating Conditions

I. Background

A. Summary

In a **Federal Register** notice dated April 4, 2017, the EPA provided public notice and solicited comment on CP Chem's AMEL request under the CAA for the operation of an MPGF at an ethylene plant in Baytown, Texas, and for the operation of an MPGF at a polyethylene plant in Old Ocean, Texas (see 82 FR 16392).¹ This action solicited comment on all aspects of the AMEL request, including the operating conditions specified in that action that are necessary to achieve a reduction in emissions of volatile organic compounds (VOC) and organic hazardous air pollutants (HAP) at least equivalent to the reduction in emissions required by various standards in 40 CFR parts 60, 61, and 63 that apply to emission sources that would be controlled by these MPGFs. These standards incorporate the design and operating requirements for flares in the General Provisions to parts 60 and 63 as part of the emission reduction requirements. Because the two proposed MPGFs cannot meet the velocity requirements in these General

¹ The MPGFs at both the ethylene plant and polyethylene plant will utilize pressure-assisted burners on all the high pressure (HP) stages; however, the first two stages on the MPGF at the polyethylene plant will also be steam-assisted.

Provisions, CP Chem requested an AMEL. In its request, CP Chem demonstrates that the proposed AMEL for each of the two facilities would achieve at least equivalent emissions reductions as flares that meet the standards in the General Provisions.

This action provides a summary of the comments received as part of the public review process, our response to those comments, and our approval of the AMEL request received from CP Chem for use of MPGFs at both their ethylene plant in Baytown, Texas, and polyethylene plant in Old Ocean, Texas, along with the operating conditions they must follow for demonstrating compliance with the approved AMEL.

B. Regulatory Flare Requirements and CP Chem's AMEL Request

CP Chem submitted a complete MPGF AMEL request, following the MPGF AMEL framework that was published in the **Federal Register** (see 81 FR 23480, April 21, 2016), to the EPA on November 28, 2016. CP Chem sought an AMEL to operate an MPGF for use during limited HP maintenance, startup, and shutdown events, as well as during upset events at their ethylene plant in Baytown, Texas. In addition, CP Chem sought an AMEL to operate an MPGF during certain routine operations (*i.e.*, the first two stages only), as well as during periods of maintenance, startup, shutdown, and upset at their polyethylene plant in Old Ocean, Texas. In its request, CP Chem cited various regulatory requirements in 40 CFR parts

60, 61, and 63 that will apply to the flare vent gas streams that will be collected and routed to their MPGFs at each of these two plants. See Table 1 for a list of regulations, by subparts, that CP Chem has identified as applicable to the two plants described above. These new source performance standards (NSPS) and national emissions standards for hazardous air pollutants (NESHAP) require that flares subject to these subparts meet the flare design and operating requirements in the General Provisions of part 60 and 63, respectively (*i.e.*, 40 CFR 60.18(b) and 63.11(b)). CP Chem is requesting that the EPA approve the AMEL to be used by each of the two plants for complying with the flare requirements in the relevant subparts as specified in Table 1.

TABLE 1—SUMMARY OF APPLICABLE RULES THAT MAY APPLY TO VENT STREAMS CONTROLLED BY MULTI-POINT GROUND FLARES

Applicable rules with vent streams going to control device(s)	CP chem ethylene plant	CP chem polyethylene plant	Rule citation from Title 40 CFR that allow for use of a flare	Provisions for alternative means of emission limitation
NSPS Subpart VV		X	60.482–10(d)	60.484(a)–(f).
NSPS Subpart VVa	X		60.482–10a(d)	60.484a(a)–(f).
NSPS Subpart DDD		X	60.562–1(a)(1)(i)(C)	CAA section 111(h)(3).
NSPS Subpart NNN	X		60.662(b)	CAA section 111(h)(3).
NSPS Subpart RRR	X		60.702(b)	CAA section 111(h)(3).
NESHAP Subpart FF	X		61.349(a)(2)	61.353(a); also see 61.12(d).
NESHAP Subpart SS	X		63.982(b)	CAA section 112(h)(3).
NESHAP Subpart UU	X		63.1034	63.1021(a)–(d).
NESHAP Subpart XX	X		63.1091	63.1097(b)(1).
			* Note—This subpart cross-references to NESHAP subpart FF above.	
NESHAP Subpart YY	X		Table 7 to § 63.1103(e) cross-references to NESHAP subpart SS above.	63.1113.
NESHAP Subpart FFFF		X	63.2450(e)(2)	63.2545(b)(1); also see 63.6(g).

The provisions in each NSPS and NESHAP cited in Table 1 that ensure flares meet certain specific requirements when used to satisfy the requirements of the NSPS or NESHAP were established as work practice standards pursuant to CAA sections 111(h)(1) or 112(h)(1). For standards established according to these provisions, CAA sections 111(h)(3) and 112(h)(3) allow the EPA to permit the use of an AMEL by a source if, after notice and opportunity for comment,² it is established to the Administrator's satisfaction that such AMEL will achieve emission reduction at least equivalent to the reduction required under the CAA section 111(h)(1) or

² CAA section 111(h)(3) specifically requires that the EPA provide an opportunity for a public hearing. The EPA provided an opportunity for a public hearing in the April 4, 2017, **Federal Register** action. However, no public hearing was requested.

112(h)(1) standard. As noted in Table 1, many of the NSPS and NESHAP in the table above also include specific regulatory provisions allowing sources to request an AMEL.

CP Chem sought such an AMEL request because their MPGFs are not designed to operate below the maximum permitted velocity requirements for flares in the General Provisions of 40 CFR parts 60 and 63. CP Chem provided information that the MPGFs they propose to use will achieve a reduction in emissions at least equivalent to the reduction in emissions for flares complying with these General Provisions requirements (for further background information on the regulatory flare requirements and a facility's ability to request an AMEL, see 82 FR 16392–16399, April 4, 2017).

II. Summary of Public Comments on CP Chem's AMEL Request

The EPA received eight public comments on this action. The public comments received fell into one of the following three bins: (1) General support for CP Chem's AMEL request, (2) general opposition to CP Chem's AMEL request, and (3) general comments outside the scope of the action. None of the comments raised issues or otherwise mentioned any specific aspect of the MPGFs (including any operating condition) proposed for either of the two plants or the EPA's authority to approve these AMEL under the CAA. None of the commenters who opposed the EPA's proposal to approve the AMEL with the operating conditions specified in the April 4, 2017, action asserted that the EPA lacked authority to approve the AMEL or that the AMEL would not achieve at least equivalent

emissions reductions as flares that meet the standards in the General Provisions. Additionally, the one commenter who generally opposed CP Chem's AMEL request did not provide any substantive reason for why they opposed the request, other than to note that existing regulations should be followed. Therefore, no changes have been made to the operating conditions specified in the April 4, 2017, action.

III. Final Notice of Approval of CP Chem's AMEL Request and Required Operating Conditions

Based on information the EPA received from CP Chem and the comments received through the public comment period, we are approving CP Chem's request for an AMEL and establishing operating requirements for the MPGF at CP Chem's ethylene plant in Baytown, Texas, and the MPGF at CP Chem's polyethylene plant in Old Ocean, Texas. The operating conditions for CP Chem's MPGF that will achieve a reduction in emissions at least equivalent to the reduction in emissions being controlled by a steam-assisted, air-assisted, or non-assisted flare complying with the requirements of either 40 CFR 63.11(b) or 40 CFR 60.18(b) are as follows: (1) The MPGF system for all HP stages at CP Chem's ethylene plant and for all HP stages excluding stage 1 and 2 for CP Chem's polyethylene plant

must be designed and operated such that the net heating value of the combustion zone gas (NHV_{cz}) is greater than or equal to 800 British thermal units per standard cubic foot (Btu/scf) or lower flammability limit of the combustion zone gas (LFL_{cz}) is less than or equal to 6.5 percent by volume. The MPGF system for HP stages 1 and 2 of CP Chem's polyethylene plant must be designed and operated such that the NHV_{cz} is greater than or equal to 600 Btu/scf or the LFL_{cz} is less than or equal to 8.0 percent by volume. Owners or operators must demonstrate compliance with the NHV_{cz} or LFL_{cz} metric by continuously complying with a 15-minute block average. Owners or operators must calculate and monitor for the NHV_{cz} or LFL_{cz} according to the following:

(a) Calculation of NHV_{cz}

(i) The owner or operator shall determine the net heating value of flare vent gas (NHV_{vg}) by following the requirements of (1)(d)–(1)(e) below. If an owner or operator elects to use a monitoring system capable of continuously measuring (*i.e.*, at least once every 15 minutes), calculating, and recording the individual component concentrations present in the flare vent gas, NHV_{vg} shall be calculated using the following equation:

$$NHV_{cz} = \frac{Q_{vg} \times NHV_{vg}}{(Q_{vg} + Q_s)} \quad (\text{Eqn. 2})$$

Where:

NHV_{cz} = Net heating value of combustion zone gas, Btu/scf.

NHV_{vg} = Net heating value of flare vent gas for the 15-minute block period as determined according to (1)(a)(i) above,

Btu/scf.

Q_{vg} = Cumulative volumetric flow of flare vent gas during the 15-minute block period, standard cubic feet (scf).

Q_s = Cumulative volumetric flow of total assist steam during the 15-minute block period, scf.

$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i \quad (\text{Eqn. 1})$$

Where:

NHV_{vg} = Net heating value of flare vent gas, Btu/scf. Flare vent gas means all gas found just prior to the MPGF. This gas includes all flare waste gas (*i.e.*, gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

i = Individual component in flare vent gas.
 n = Number of components in flare vent gas.

x_i = Concentration of component i in flare vent gas, volume fraction.

NHV_i = Net heating value of component i determined as the heat of combustion where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius (°C) and 1 atmosphere (or constant pressure) with water in the gaseous state from values published in the literature, and then the values converted to a volumetric basis using 20 °C for "standard temperature." Table 2 summarizes component properties including net heating values.

(ii) For all MPGF HP stages at CP Chem's ethylene plant and for all MPGF HP stages, excluding stage 1 and 2 for CP Chem's polyethylene plant, NHV_{vg} = NHV_{cz} .

(iii) For HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, NHV_{cz} shall be calculated using the following equation:

(b) Calculation of LFL_{cz}

(i) The owner or operator shall determine LFL_{cz} from compositional analysis data by using the following equation:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left(\frac{X_i}{LFL_i} \right)} \times 100\% \quad (\text{Eqn. 3})$$

Where:

LFL_{vg} = Lower flammability limit of flare vent gas, volume percent (vol %).

n = Number of components in the vent gas.

i = Individual component in the vent gas.

X_i = Concentration of component i in the vent gas, vol %.

LFL_i = Lower flammability limit of component i as determined using values

published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite LFL (*e.g.*, $LFL_{N_2} = \infty$, so that $X_{N_2}/LFL_{N_2} = 0$). LFL values for common flare vent gas components are provided in Table 2.

(ii) For all MPGF HP stages at CP Chem's ethylene plant and for all MPGF

HP stages, excluding stages 1 and 2 for CP Chem's polyethylene plant, LFL_{vg} = LFL_{cz} .

(iii) For HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, LFL_{cz} shall be calculated using the following equation:

$$LFL_{\text{eq}} = \frac{LFL_{\text{vg}} \times (Q_{\text{vg}} + Q_{\text{t}})}{Q_{\text{vg}}} \quad (\text{Eqn. 4})$$

Where:

LFL_{eq} = Lower flammability limit of combustion zone gas, vol %.

LFL_{vg} = Lower flammability limit of flare vent gas, vol %.

Q_{vg} = Cumulative volumetric flow of flare vent gas during the 15-minute block period, scf.

Q_{t} = Cumulative volumetric flow of total assist steam during the 15-minute block period, scf.

(c) The operator of an MPGF system shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring the volumetric flow rate of flare vent gas (Q_{vg}) and the volumetric flow rate of total assist steam (Q_{t}).

(i) The flow rate monitoring systems must be able to correct for the temperature and pressure of the system and output parameters in standard conditions (*i.e.*, a temperature of 20 °C (68 °F) and a pressure of 1 atmosphere).

(ii) Mass flow monitors may be used for determining volumetric flow rate of flare vent gas provided the molecular

weight of the flare vent gas is determined using compositional analysis so that the mass flow rate can be converted to volumetric flow at standard conditions using the following equation:

$$Q_{\text{vol}} = \frac{Q_{\text{mass}} \times 385.3}{MW_{\text{t}}} \quad (\text{Eqn. 5})$$

Where:

Q_{vol} = Volumetric flow rate, scf per second.

Q_{mass} = Mass flow rate, pounds per second.

385.3 = Conversion factor, scf per pound-mole.

MW_{t} = Molecular weight of the gas at the flow monitoring location, pounds per pound-mole.

(iii) Mass flow monitors may be used for determining volumetric flow rate of total assist steam. Use Equation 5 to convert mass flow rates to volumetric flow rates. Use a molecular weight of 18 pounds per pound-mole for total assist steam.

(d) The operator shall install, operate, calibrate, and maintain a monitoring

system capable of continuously measuring (*i.e.*, at least once every 15 minutes), calculating, and recording the individual component concentrations present in the flare vent gas or the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording NHV_{vg} (in Btu/scf).

(e) For each measurement produced by the monitoring system used to comply with (1)(d) above, the operator shall determine the 15-minute block average as the arithmetic average of all measurements made by the monitoring system within the 15-minute period.

(f) The operator must follow the calibration and maintenance procedures according to Table 3. Maintenance periods, instrument adjustments, or checks to maintain precision and accuracy and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material.

TABLE 2—INDIVIDUAL COMPONENT PROPERTIES

Component	Molecular formula	MW_{t} (pounds per pound-mole)	NHV_{t} (British thermal units per standard cubic foot)	LFL_{t} (volume %)
Acetylene	C_2H_2	26.04	1,404	2.5
Benzene	C_6H_6	78.11	3,591	1.3
1,2-Butadiene	C_4H_6	54.09	2,794	2.0
1,3-Butadiene	C_4H_6	54.09	2,690	2.0
iso-Butane	C_4H_{10}	58.12	2,957	1.8
n-Butane	C_4H_{10}	58.12	2,968	1.8
cis-Butene	C_4H_8	56.11	2,830	1.6
iso-Butene	C_4H_8	56.11	2,928	1.8
trans-Butene	C_4H_8	56.11	2,826	1.7
Carbon Dioxide	CO_2	44.01	0	∞
Carbon Monoxide	CO	28.01	316	12.5
Cyclopropane	C_3H_6	42.08	2,185	2.4
Ethane	C_2H_6	30.07	1,595	3.0
Ethylene	C_2H_4	28.05	1,477	2.7
Hydrogen	H_2	2.02	274	4.0
Hydrogen Sulfide	H_2S	34.08	587	4.0
Methane	CH_4	16.04	896	5.0
Methyl-Acetylene	C_3H_4	40.06	2,088	1.7
Nitrogen	N_2	28.01	0	∞
Oxygen	O_2	32.00	0	∞
Pentane+ (C5+)	C_5H_{12}	72.15	3,655	1.4
Propadiene	C_3H_4	40.06	2,066	2.16
Propane	C_3H_8	44.10	2,281	2.1
Propylene	C_3H_6	42.08	2,150	2.4
Water	H_2O	18.02	0	∞

TABLE 3—ACCURACY AND CALIBRATION REQUIREMENTS

Parameter	Accuracy requirements	Calibration requirements
Flare Vent Gas Flow Rate.	±20 percent of flow rate at velocities ranging from 0.1 to 1 foot per second. ±5 percent of flow rate at velocities greater than 1 foot per second.	Performance evaluation biennially (every 2 years) and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspections and checks of system operation every 3 months, unless the system has a redundant flow sensor. Select a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.
Flow Rate for All Flows Other Than Flare Vent Gas.	±5 percent over the normal range of flow measured or 1.9 liters per minute (0.5 gallons per minute), whichever is greater, for liquid flow. ±5 percent over the normal range of flow measured or 280 liters per minute (10 cubic feet per minute), whichever is greater, for gas flow. ±5 percent over the normal range measured for mass flow.	Conduct a flow sensor calibration check at least biennially (every two years); conduct a calibration check following any period of more than 24 hours throughout which the flow rate exceeded the manufacturer's specified maximum rated flow rate or install a new flow sensor. At least quarterly, inspect all components for leakage, unless the continuous parameter monitoring system has a redundant flow sensor.
Pressure	±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.	Record the results of each calibration check and inspection. Locate the flow sensor(s) and other necessary equipment (such as straightening vanes) in a position that provides representative flow; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances. Review pressure sensor readings at least once a week for straight-line (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated.
Net Heating Value by Calorimeter.	±2 percent of span	Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation, and galvanic corrosion every 3 months, unless the system has a redundant pressure sensor. Select a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion. Calibration requirements should follow manufacturer's recommendations at a minimum.
Net Heating Value by Gas Chromatograph.	As specified in Performance Specification (PS) 9 of 40 CFR part 60, appendix B.	Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation. Where feasible, select a sampling location at least 2 equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least 2 equivalent duct diameters from the nearest control device, point of pollutant generation, air in-leakages, or other point at which a change in the pollutant concentration or emission rate occurs. Follow the procedure in PS 9 of 40 CFR part 60, appendix B, except that a single daily mid-level calibration check can be used (rather than triplicate analysis), the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).

(2) The MPGF system shall be operated with a flame present at all times when in use. Each burner on HP stages 1 and 2 of CP Chem's polyethylene plant MPGF must have a pilot with a continuously lit pilot flame. Additionally, each HP stage of CP Chem's ethylene plant MPGF and all HP stages, excluding stages 1 and 2 for CP Chem's polyethylene plant MPGF, must have at least two pilots with a continuously lit pilot flame. Each pilot flame must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame. The time, date, and duration of any complete loss of pilot flame on any of the individual MPGF burners on HP stages 1 and 2 of CP

Chem's polyethylene plant MPGF, on any of the HP stages of CP Chem's ethylene plant MPGF, and on any of the HP stages, excluding stages 1 and 2 of CP Chem's polyethylene plant MPGF, must be recorded. Each monitoring device must be maintained or replaced at a frequency in accordance with the manufacturer's specifications.

(3) The MPGF system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. A video camera that is capable of continuously recording (i.e., at least one frame every 15 seconds with time and date stamps) images of the flare flame and a reasonable distance above the flare flame at an angle suitable for

visible emissions observations must be used to demonstrate compliance with this requirement. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the video camera images may be viewed at any time.

(4) The operator of an MPGF system shall install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system capable of monitoring and recording the position for each staging valve to ensure that the MPGF operates within the range of tested conditions or within the range of the manufacturer's specifications. The

pressure monitor shall meet the requirements in Table 3. Maintenance periods, instrument adjustments or checks to maintain precision and accuracy, and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material.

(5) Recordkeeping Requirements.

(a) All data must be recorded and maintained for a minimum of 3 years or for as long as required under applicable rule subpart(s), whichever is longer.

(6) Reporting Requirements.

(a) The information specified in sections III (6)(b) and (c) of this document below must be reported in the timeline specified by the applicable rule subpart(s) for which the MPGF will control emissions.

(b) Owners or operators shall include the following information in their initial Notification of Compliance status report:

(i) Specify flare design as a pressure-assisted MPGF. CP Chem's polyethylene plant shall also clearly note that HP stages 1 and 2 are also steam-assisted.

(ii) All visible emission readings, $NHVC$ and/or $LFLC$ determinations, and flow rate measurements. For MPGF, exit velocity determinations do not need to be reported as the maximum permitted velocity requirements in the General Provisions at 40 CFR 60.18(b) and 40 CFR 63.11(b) are not applicable.

(iii) All periods during the compliance determination when a complete loss of pilot flame on any stage of MPGF burners occurs, and, for HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, all periods during the compliance determination when a complete loss of pilot flame on an individual burner occurs.

(iv) All periods during the compliance determination when the pressure monitor(s) on the main flare header show the MPGF burners operating outside the range of tested conditions or outside the range of the manufacturer's specifications.

(v) All periods during the compliance determination when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation and is or when a stage of the MPGF should be in operation and is not.

(c) The owner or operator shall notify the Administrator of periods of excess emissions in their Periodic Reports. These periods of excess emissions shall include:

(i) Records of each 15-minute block for all HP stages of CP Chem's ethylene plant MPGF and for all HP stages excluding stages 1 and 2 of CP Chem's polyethylene plant MPGF during which

there was at least 1 minute when regulated material was routed to the MPGF and a complete loss of pilot flame on a stage of burners occurred, and, for HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, records of each 15-minute block during which there was at least 1 minute when regulated material was routed to the MPGF and a complete loss of pilot flame on an individual burner occurred.

(ii) Records of visible emissions events (including the time and date stamp) that exceed more than 5 minutes in any 2-hour consecutive period.

(iii) Records of each 15-minute block period for which an applicable combustion zone operating limit (*i.e.*, $NHVC$ or $LFLC$) is not met for the MPGF when regulated material is being combusted in the flare. Indicate the date and time for each period, the $NHVC$ and/or $LFLC$ operating parameter for the period and the type of monitoring system used to determine compliance with the operating parameters (*e.g.*, gas chromatograph or calorimeter). For CP Chem's polyethylene plant MPGF, also indicate which HP stages were in use.

(iv) Records of when the pressure monitor(s) on the main flare header show the MPGF burners are operating outside the range of tested conditions or outside the range of the manufacturer's specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of MPGF burners affected, and the range of tested conditions or manufacturer's specifications.

(v) Records of when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation and is or when a stage of the MPGF should be in operation and is not. Indicate the date and time for each period, whether the stage was supposed to be open, but was closed or vice versa, and the stage(s) and number of MPGF burners affected.

Dated: June 1, 2017.

Stephen Page,
Director, Office of Air Quality Planning and Standards.

[FR Doc. 2017-12698 Filed 6-16-17; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL ELECTION COMMISSION

Sunshine Act Notice

AGENCY: Federal Election Commission.

DATE AND TIME: Thursday, June 22, 2017 at 10:00 a.m.

PLACE: 999 E Street NW., Washington, DC (Ninth Floor).

STATUS: This hearing will be open to the public.

ITEM TO BE DISCUSSED: *Audit Hearing:* Illinois Republican Party.

Individuals who plan to attend and require special assistance, such as sign language interpretation or other reasonable accommodations, should contact Dayna Brown, Secretary and Clerk, at (202) 694-1040, at least 72 hours prior to the hearing date.

PERSON TO CONTACT FOR INFORMATION: Judith Ingram, Press Officer, Telephone: (202) 694-1220.

Dayna C. Brown,
Secretary and Clerk of the Commission.

[FR Doc. 2017-12785 Filed 6-15-17; 11:15 am]

BILLING CODE 6715-01-P

FEDERAL RESERVE SYSTEM

Notice of Proposals To Engage in or To Acquire Companies Engaged in Permissible Nonbanking Activities

The companies listed in this notice have given notice under section 4 of the Bank Holding Company Act (12 U.S.C. 1843) (BHC Act) and Regulation Y, (12 CFR part 225) to engage *de novo*, or to acquire or control voting securities or assets of a company, including the companies listed below, that engages either directly or through a subsidiary or other company, in a nonbanking activity that is listed in § 225.28 of Regulation Y (12 CFR 225.28) or that the Board has determined by Order to be closely related to banking and permissible for bank holding companies. Unless otherwise noted, these activities will be conducted throughout the United States.

Each notice is available for inspection at the Federal Reserve Bank indicated. The notice also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether the proposal complies with the standards of section 4 of the BHC Act.

Unless otherwise noted, comments regarding the applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than July 3, 2017.

A. Federal Reserve Bank of Dallas (Robert L. Triplett III, Senior Vice President) 2200 North Pearl Street, Dallas, Texas 75201-2272:

1. *First Baird Bancshares, Inc.*, Weatherford, Texas; to acquire directly and indirectly voting shares of Sharp BancSystems, Inc., Bedford, Texas, and thereby engage in data processing activities pursuant to section 225.28(b)(14)(i) of Regulation Y.

Jon Niemann, Chairman
Emily Lindley, Commissioner
Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 17, 2019

MR CLAYTON K FALCON
EH&S MANAGER
CHEVRON PHILLIPS CHEMICAL COMPANY LP
21441 LOOP 419
SWEENEY TX 77480-1426

Re: Alternative Method of Compliance (AMOC) No. 97 Revision
Vapor Destruction Unit 117 Alternative Compliance
Regulated Entity Number: RN100825249
Customer Reference Number: CN800303614
Associated Permit Numbers: 103832, N166M1, and O2151

Dear Mr. Falcon:

This correspondence is in response to Chevron Phillips Chemical Company LP's (CPCHEM's) March 4, 2019 request for an AMOC revision and permanent approval of an alternative emission limit for carbon monoxide (CO) from the Vapor Destruction Unit (VDU) at the new Polyethylene Plant, Old Ocean Facility site in accordance with 30 Texas Administrative Code (TAC) §117.310(d)(2).

Under 30 TAC §117.310(c)(1)(a), the VDU exhaust (EPN 42-97-9620) CO emissions are limited at all times to 400 ppmv at 3.0% O₂ dry basis on a rolling 24-hour average. We understand that CPCHEM is requesting the VDU be allowed to operate at 800 ppmv (corrected to 3.0% O₂) during the stand-by and low flow situations due to the physical configuration of the VDU, the stack, and the location of the CO continuous emission monitor system (CEMS) probe. The O₂ levels during low flow conditions approach ambient conditions due to air intrusion at the top of the very large stack where the CEMS probe is located. Correcting to 3% O₂ causes the high CO emission readings.

We also understand the elevated, corrected CO levels are not an indication of a lower destruction rate efficiency (DRE) for the VDU. The VDU is designed to handle intermittent, non-emergency waste gas streams during planned maintenance, start-up and shutdown (MSS) operations. The VDU is represented and vendor-guaranteed for a DRE of 99% throughout the entire range of operations and concentrations of VOC streams during treater regeneration gas MSS and maintains 300 Btu/scf in the vent gas.

The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve your AMOC request. The VDU CO emissions are approved up to 800 ppmv for up to 50% of the flow capacity of the control device.

This AMOC approval may supersede certain requirements or representations in Permit Nos. 103832 and N166. To ensure effective and consistent enforceability, we request that CPCHEM incorporate this AMOC into the permit(s) through submittal of alteration(s) no later than 90 days after this approval.

This approval may also change applicable requirements for the site, which are identified in the site operating permit (SOP) O2151. The TCEQ recommends the submittal of a SOP administrative revision if any changes are necessary. Changes meeting the criteria for an administrative revision can be operated

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May 17, 2019
Page 2
Mr. Clayton K. Falcon

Re: Permit Numbers: 103832, N168, and C2151

before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records at the site.

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wilson". The signature is fluid and cursive, with the first name "Michael" being more legible than the last name "Wilson".

Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Director, Environmental Health, Brazoria County Health Department, Angleton
Air Section Manager, Region 12 - Houston
Rebecca Partee, Manager, Chemical New Source Review Permits Section, Air Permits Division,
OA: MC-163
Jesse E. Chacon, P.E., Manager, Operating Permits Section, Air Permits Division, OA: MC-163

Project Number: 299342

Appendix A

Acronym List 160

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 162

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
40-36-1013	Unit 40 Catalyst Activator Heater	VOC	0.03	0.14	5, 9, 35, 38	5, 35, 37, 38	5, 35, 38
		CO	0.49	2.17			
		NOx	0.24	1.05			
		PM	0.05	0.20			
		PM ₁₀	0.05	0.20			
		PM _{2.5}	0.05	0.20			
		SO ₂	0.08	0.36			
40-36-1013 MSS	Unit 40 Catalyst Activator Heater MSS (7)	CO	2.60	----	26	24, 26, 31, 37	
		NOx	0.39	----			
41-36-1113	Unit 41 Catalyst Activator Heater	VOC	0.03	0.14	5, 9, 35, 38	5, 35, 37, 38	5, 35, 38
		CO	0.49	2.17			
		NOx	0.24	1.05			
		PM	0.05	0.20			
		PM ₁₀	0.05	0.20			
		PM _{2.5}	0.05	0.20			
		SO ₂	0.08	0.37			
41-36-1113 MSS	Unit 41 Catalyst Activator Heater MSS (7)	CO	2.60	----	26	24, 26, 31, 37	
		NOx	0.39	----			
40-35-1014	Unit 40 HEPA Activator Filters A/B	VOC	2.50	0.37	18	16, 18, 37	
		SO ₂	1.24	1.68			
		PM	0.09	0.10			

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		PM ₁₀	0.09	0.10			
		PM _{2.5}	0.09	0.10			
41-35-1114	Unit 41 HEPA Activator Filters A/B	VOC	2.50	0.37	18	16, 18, 37	
		SO ₂	1.24	1.68			
		PM	0.09	0.10			
		PM ₁₀	0.09	0.10			
		PM _{2.5}	0.09	0.10			
41-35-6105	Unit 41 Additive Bag Discharger Filter	PM	0.03	0.10	18	18, 37	
		PM ₁₀	0.03	0.10			
		PM _{2.5}	0.03	0.10			
40-35-6105	Unit 40 Additive Bag Discharger Filter	PM	0.03	0.10	18	18, 37	
		PM ₁₀	0.03	0.10			
		PM _{2.5}	0.03	0.10			
41-35-61AD	Unit 41 Additive Hopper Filters A, B, C, D	PM	0.09	0.01	18	18, 37	
		PM ₁₀	0.09	0.01			
		PM _{2.5}	0.09	0.01			
40-35-61AF	Unit 40 Additive Hopper Filters A, B, C, D, E, F	PM	0.14	0.01	18	18, 37	
		PM ₁₀	0.14	0.01			
		PM _{2.5}	0.14	0.01			
40-35-6181	Unit 40 Talc Additive Receiver Filter	PM	0.12	0.15	18	18, 37	
		PM ₁₀	0.12	0.15			

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		PM _{2.5}	0.12	0.15			
40-35-6191	Unit 40 Slip Additive Receiver Filter	PM	0.07	0.11	18	18, 37	
		PM ₁₀	0.07	0.11			
		PM _{2.5}	0.07	0.11			
40-35-6401	Unit 40 Central Vacuum Secondary Filter	PM	0.03	0.03	18	18, 37	
		PM ₁₀	0.03	0.03			
		PM _{2.5}	0.03	0.03			
40-35-8103	Unit 40 Blower Guard Filter	PM	0.06	0.06	18	18, 37	
		PM ₁₀	0.06	0.06			
		PM _{2.5}	0.06	0.06			
41-35-6401	Unit 41 Central Vacuum Secondary Filter	PM	0.03	0.03	18	18, 37	
		PM ₁₀	0.03	0.03			
		PM _{2.5}	0.03	0.03			
40-35-3102	Unit 40 S-1 Catalyst Charge Purge Filter	PM	0.01	0.05	18	18, 37	
		PM ₁₀	0.01	0.05			
		PM _{2.5}	0.01	0.05			
41-35-3102	Unit 41 PF Catalyst Charge Purge Filter	PM	0.01	0.05	18	18, 37	
		PM ₁₀	0.01	0.05			
		PM _{2.5}	0.01	0.05			
41-35-6310	Unit 41 Pellet Surge Hopper Filter	VOC	18.40	(5)	5, 10, 18, 35, 36	5, 10, 18, 35, 36, 37	5, 35
		PM	0.04	0.15			

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		PM ₁₀	0.04	0.15			
		PM _{2.5}	0.04	0.15			
40-35-6310	Unit 40 Pellet Surge Hopper Filter	VOC	18.40	(5)	5, 10, 18, 35, 36	5, 10, 18, 35, 36, 37	5, 35
		PM	0.04	0.15			
		PM ₁₀	0.04	0.15			
		PM _{2.5}	0.04	0.15			
40-35-8120	Unit 40 Talc Additive Silo Vent Filter	PM	0.01	0.04	18	18, 37	
		PM ₁₀	0.01	0.04			
		PM _{2.5}	0.01	0.04			
40-35-8130	Unit 40 Slip Additive Silo Vent Filter	PM	0.02	0.06	18	18, 37	
		PM ₁₀	0.02	0.06			
		PM _{2.5}	0.02	0.06			
41-25-6301	Unit 41 Pellet Dewatering Dryer	VOC	18.40	(5)	10, 35, 36	10, 35, 36, 37	35
40-25-6300, 40-25-6301	Unit 40 Pellet Dewatering Dryers	VOC	18.40	(5)	10, 35, 36	10, 35, 36, 37	35
41-35-80LO, 41-35-8011, 41-35-8021	Unit 41 Loadout, Storage, and Off-Spec Silo Filters	VOC	18.40	(5)	10, 18, 36	10, 18, 36, 37	
		PM	0.16	0.54			
		PM ₁₀	0.16	0.54			
		PM _{2.5}	0.16	0.54			

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
40-35-80LO, 40-35-8011, 40-35-8021	Unit 40 Loadout, Storage, and Off-Spec Silo Filters	VOC	18.40	(5)	10, 18, 36	10, 18, 36, 37	
		PM	0.16	0.54			
		PM ₁₀	0.16	0.54			
		PM _{2.5}	0.16	0.54			
40-35-6500	Unit 40 Talc Vent Filter	PM	0.04	0.04	18	18, 37	
		PM ₁₀	0.04	0.04			
		PM _{2.5}	0.04	0.04			
40-35-6501	Unit 40 Slip Vent Filter	PM	0.04	0.04	18	18, 37	
		PM ₁₀	0.04	0.04			
		PM _{2.5}	0.04	0.04			
87-35-3120	Unit 40 & 41 SIT Deheeling Dust Filter	PM	0.18	0.38	18	18, 37	
		PM ₁₀	0.18	0.38			
		PM _{2.5}	0.18	0.38			
PVOC-CAP	Unit 40 & 41 Pellet VOC Cap	VOC	(5)	42.61	5, 10, 18, 36	5, 10, 18, 36, 37	5
MSS-EQUIP	Unit 40 & 41 Equipment Opening MSS	VOC	10.53	0.79	26	24, 25, 26, 37	
MSS-MISC	Unit 40 & 41 Miscellaneous MSS	VOC	1.00	1.10	26, 27, 29	24, 26, 27, 29, 37	
MSS-LOAD	Unit 40 & 41 Waste Loading to Trucks	VOC	1.61	0.02	26, 28	24, 26, 28, 37	

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
MSS-PM	Unit 40 & 41 Solids Handling	PM	3.75	0.67	18	18, 37	
		PM ₁₀	1.77	0.31			
		PM _{2.5}	0.27	0.05			
42-97-9610	Unit 40 & 41 Flare	VOC	248.08	(9)	3, 5, 9, 12, 13, 34	3, 5, 9, 12, 13, 34, 37	3,5, 13
		CO	348.67				
		NO _x	72.11				
		SO ₂	15.21				
		H ₂ S	0.08				
42-97-9620	Unit 40 & 41 Vapor Destruction Unit	VOC	29.82	(9)	5, 9, 14, 34, 35, 38	5, 9, 14, 34, 35, 37, 38	5, 35
		CO	335.88				
		NO _x	41.37				
		SO ₂	4.29				
		H ₂ S	0.04				
42-97-9610 & 42-97-9620	Unit 40 & 41 Flare & Vapor Destruction Unit	VOC	(9)	65.22	5, 9, 12, 14, 34	5, 9, 12, 14, 34, 37	5, 12, 14
		CO		446.91			
		NO _x		89.96			
		SO ₂		9.59			
		H ₂ S		0.12			
TOX	Unit 40 & 41 Thermal Oxidizer	VOC	0.10	0.42	9, 15, 35	9, 15, 35, 37	35
		CO	0.58	2.55			
		NO _x	0.58	2.55			

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		SO ₂	0.14	0.60			
		PM	0.07	0.32			
		PM ₁₀	0.07	0.32			
		PM _{2.5}	0.07	0.32			
42-97-9820	Unit 40 & 41 Wastewater API Separator	VOC	2.20	0.04	Project 179322, 06/22/2012, Pg. A-6		
TK-01	Unit 40 & 41 Locomotive Engine Tank	VOC	0.55	0.01	3, 8, Project 265867, 02/21/2017, Table A-5	3, 8	3, 8
42-95-0421	Unit 40 & 41 Fresh 1-Hexene Tank	VOC	0.37	0.94	3, 8	3, 8, 37	3, 8
42-95-0422	Unit 40 & 41 Fresh 1-Hexene Tank	VOC	0.37	0.93	3, 8	3, 8, 37	3, 8
SAND-01	Unit 40 & 41 Rail Repair Sandblasting	PM	1.43	0.06	33	33, 37	
		PM ₁₀	0.17	0.01			
		PM _{2.5}	0.17	0.01			
42-05-9201	Unit 40 & 41 Cooling Tower	VOC	0.84	1.58	19	19, 37	
		PM	3.30	10.95			
		PM ₁₀	3.27	10.87			
		PM _{2.5}	0.85	3.05			
FUG-01	Unit 40 & 41 Fugitive Emissions (6)	VOC	4.71	20.61	3, 5, 6	3, 5, 6, 37	3, 5, 6

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
EMG-ENG 1	Emergency Generator Engine	VOC	0.18	(8)	3, 5, 38	3, 5, 37, 38	3, 5
		CO	0.52				
		NOx	8.07				
		PM	0.08				
		PM ₁₀	0.08				
		PM _{2.5}	0.08				
		SO ₂	0.01				
EMG-ENG 2	Emergency Generator Engine	VOC	0.18	(8)	3, 5, 38	3, 5, 37, 38	3, 5
		CO	0.52				
		NOx	8.07				
		PM	0.08				
		PM ₁₀	0.08				
		PM _{2.5}	0.08				
		SO ₂	0.01				
EMG-ENG 3	Emergency Generator Engine	VOC	0.18	(8)	3, 5, 38	3, 5, 37, 38	3, 5
		CO	0.52				
		NOx	8.07				
		PM	0.08				
		PM ₁₀	0.08				
		PM _{2.5}	0.08				
		SO ₂	0.01				

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
EMG-ENG 1, 2, 3	Emergency Generator Engine 1, 2, 3	VOC	(8)	0.03	3, 5, 38	3, 5, 37, 38	3, 5
		CO		0.08			
		NOx		1.21			
		PM		0.01			
		PM ₁₀		0.01			
		PM _{2.5}		0.01			
		SO ₂		<0.01			
87-97-1510	Fire Water Pump Engine	VOC	0.08	<0.01	3, 5	3, 5, 20, 37	3, 5
		CO	0.40	0.02			
		NOx	1.00	0.05			
		PM	0.04	<0.01			
		PM ₁₀	0.04	<0.01			
		PM _{2.5}	0.04	<0.01			
		SO ₂	<0.01	<0.01			
EMG-ENGTK-1	Emergency Generator Engine Diesel Tank No. 1	VOC	0.10	<0.01	8	8, 37	8
EMG-ENGTK-2	Emergency Generator Engine Diesel Tank No. 2	VOC	0.10	<0.01	8	8, 37	8
EMG-ENGTK-3	Emergency Generator Engine Diesel Tank No. 3	VOC	0.10	<0.01	8	8, 37	8

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
FWP-ENGTK	Fire Water Pump Engine Diesel Tank	VOC	0.01	<0.01	8	8, 37	8
MSS-FRAC CC	Unit 40 & 41 Frac Tanks Carbon Control	VOC	0.07	<0.01	26, 32	26, 29, 32, 37	
MSS-TKCONT	Unit 40 & 41 Temporary Control for Tank Roof Landing	VOC	2.43	0.01	26, 32	26, 29, 32, 37	
		CO	1.03	5.08			
		NO _x	0.77	3.81			
		H ₂ S	<0.01	<0.01			
		SO ₂	0.04	0.19			
81-97-9611	Unit 81 Flare (Routine and MSS Emissions)	VOC	248.91	5.25	53, 58, 65	37, 52, 58, 65	
		CO	117.63	11.73			
		NO _x	22.84	2.28			
		H ₂ S	<0.01	<0.01			
		SO ₂	0.19	0.02			
FUG-02	Unit 81 Fugitives (6)	VOC	2.33	10.21	6, 53	6, 37	6
81-05-9202	Unit 81 Cooling Tower	VOC	0.09	0.39	53, 64	37, 64	
		PM	0.06	0.25			
		PM ₁₀	0.06	0.24			
		PM _{2.5}	0.02	0.07			
TK-1HEX1	Unit 81 1-Hexene Tank	VOC	1.80	-	3, 51, 53	3, 37, 51	3
TK-1HEX2	Unit 81 1-Hexene Tank	VOC	1.80	-	3, 51, 53	3, 37, 51	3

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TK-1HEX3	Unit 81 1-Hexene Tank	VOC	1.80	-	3, 51, 53	3, 37, 51	3
TK-INTOL	Unit 81 Intermediate Olefins Tank	VOC	0.07	-	3, 51, 53	3, 37, 51	3
TKCAP	Unit 81 Tank Cap	VOC	-	9.29	3, 53	3,37	3
LOADRACK	Unit 81 Uncontrolled Tank Truck Loading	VOC	0.10	<0.01	53, 55	37, 52, 55, 56	55
VCU-1	Unit 81 Collected and Controlled Railcar Loading	VOC	0.65	0.18	53, 59, 65, 66	37, 52, 59, 65, 66	66
		NO _x	2.76	2.38			
		CO	2.76	2.38			
		PM	0.34	0.30			
		PM ₁₀	0.34	0.30			
		PM _{2.5}	0.34	0.30			
		SO ₂	0.27	0.23			
MELT	Unit 81 MELT Handling Uncontrolled Emissions	VOC	0.44	0.21	53	37, 52	
MELT-TO	Unit 81 Melt Handling Controlled Emissions	VOC	0.03	0.13	53, 63, 65, 66	37, 52, 63, 65, 66	66
		NO _x	0.30	1.31			
		CO	0.30	1.31			
		PM	0.04	0.16			
		PM ₁₀	0.04	0.16			
		PM _{2.5}	0.04	0.16			

Major NSR Summary Table

Permit Numbers: 103832, N166M4, PSDTX1566M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		SO ₂	0.03	0.13			
MSS-ATM	Unit 81 Uncontrolled MSS	VOC	93.71	2.38		37	
		PM	0.10	<0.01			
		PM ₁₀	0.05	<0.01			
		PM _{2.5}	0.01	<0.01			
MSS-CONT	Unit 81 Controlled MSS	VOC	7.48	0.16	27, 32	27, 32, 37	
		CO	2.19	0.13			
		NO _x	1.56	0.21			
		PM	0.08	0.01			
		PM ₁₀	0.08	0.01			
		PM _{2.5}	0.08	0.01			
		SO ₂	0.01	<0.01			

Footnotes:

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10

IOC-U - inorganic compounds (unspeciated)

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Annual VOC emissions for this source are authorized under the Pellet VOC Cap (EPN PVOC-CAP).
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (7) MSS annual emissions included in routine.
- (8) 3 emergency engines are authorized and are represented to operate up to 100 hours each per year, with a combined total power output total of 1.5 MW and annual emission cap.
- (9) Flare and Vapor Destruction Unit emissions combined on an annual basis.

Major NSR Summary Table

Permit Numbers: GHGPSDTX196M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
40-36-1013	Unit 40 Catalyst Activator Heater	N ₂ O (5)	--	0.01	39, 40, 41, 46	39, 40, 41, 47	
		CH ₄ (5)	--	0.06			
		CO ₂ (5)	--	3061.02			
		CO _{2e}	--	3064.19			
41-36-1113	Unit 41 Catalyst Activator Heater	N ₂ O (5)	--	0.01	39, 40, 41, 46	39, 40, 41, 47	
		CH ₄ (5)	--	0.06			
		CO ₂ (5)	--	3061.02			
		CO _{2e}	--	3064.19			
42-97-9610	Flare	N ₂ O (5)	--	1.18	39, 40, 42	39, 40, 42, 47	
		CH ₄ (5)	--	355.63			
		CO ₂ (5)	--	124768.9			
		CO _{2e}	--	134011.7			
VDU	Vapor Destruction Unit	N ₂ O (5)	--	0.02	39, 40, 42	39, 40, 42, 47	
		CH ₄ (5)	--	0.53			
		CO ₂ (5)	--	31,539.58			
		CO _{2e}	--	31,558.19			
TOX	Thermal Oxidizer	N ₂ O (5)	--	0.01	39, 40, 42	39, 40, 42, 47	
		CH ₄ (5)	--	0.12			
		CO ₂ (5)	--	5271.27			
		CO _{2e}	--	5278.42			

Major NSR Summary Table

Permit Numbers: GHGPSDTX196M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
MSS-TKCONT	Temporary Control for Tank Roof Landing	N ₂ O (5)	--	<0.01	39, 45	39, 45, 47	
		CH ₄ (5)	--	0.03			
		CO ₂ (5)	--	1509.16			
		CO _{2e}	--	1510.73			
FUG-01	Fugitives	CH ₄ (5)	--	309.36	39, 44	39, 44, 47	
		CO _{2e}	--	7734.05			
PVOC-CAP	Pellet VOC - Cap	CH ₄ (5)	--	2.76	39	39, 47	
		CO _{2e}	--	68.94			
EMG-ENG 1, 2, 3	Emergency Generator Engines 1, 2, 3	N ₂ O (5)	--	<0.01	39, 40, 43	39, 40, 43, 47	
		CH ₄ (5)	--	<0.01			
		CO ₂ (5)	--	38.68			
		CO _{2e}	--	38.82			
87-97-1510	Fire Water Pump Engine	N ₂ O (5)	--	<0.01	39	39, 47	
		CH ₄ (5)	--	<0.01			
		CO ₂ (5)	--	12.33			
		CO _{2e}	--	12.37			
42-05-9201	Cooling Tower	CH ₄ (5)	--	0.05	39	39, 47	
		CO _{2e}	--	1.30			
42-97-9820	Wastewater	CH ₄ (5)	--	<0.01	39	39, 47	
		CO _{2e}	--	0.02			

Major NSR Summary Table

Permit Numbers: GHGPSDTX196M1					Issuance Date: October 15, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
MSS-EQUIP	Equipment Opening MSS	CH ₄ (5)	--	0.03	39, 45	39, 45, 47	
		CO _{2e}	--	0.65			
MSS-MISC	Miscellaneous MSS	CH ₄ (5)	--	0.02	39, 45	39, 45, 47	
		CO _{2e}	--	0.55			
MSS-LOAD	Waste Loading to Trucks	CH ₄ (5)	--	<0.01	39, 45	39, 45, 47	
		CO _{2e}	--	0.01			
MSS-FRAC CC	Frac Tanks Carbon Control	CH ₄ (5)	--	<0.01	39, 45	39, 45, 47	
		CO _{2e}	--	<0.01			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) N₂O- nitrous oxide.
CH₄- methane.
CO₂- carbon dioxide.
CO_{2e}- carbon dioxide equivalents based on the following Global Warming Potentials (Effective January 1, 2015): CO₂ (1), N₂O (298), CH₄ (25).
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Emissions updated to be consistent with the records required by 30 TAC §116.164(b).



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Chevron Phillips Chemical Company LP
Authorizing the Construction and Operation of
Sweeny Old Ocean Facilities
Located at Sweeny, Brazoria County, Texas
Latitude 29° 4' 30" Longitude -95° 44' 48"

Permits: 103832, N166M4, GHGPSDTX196M1 and
PSDTX1566M1

Amendment Date: October 15, 2021

Expiration Date: August 8, 2023

A handwritten signature in black ink, appearing to read "T. G. Bahr".

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] ¹
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius	GLCmax = maximum (predicted) ground-level concentration
°F = Temperature in degrees Fahrenheit	gpm = gallon per minute
°K = Temperature in degrees Kelvin	gr/1000scf = grain per 1000 standard cubic feet
µg = microgram	gr/dscf = grain per dry standard cubic feet
µg/m ³ = microgram per cubic meter	H ₂ CO = formaldehyde
acfm = actual cubic feet per minute	H ₂ S = hydrogen sulfide
AMOC = alternate means of control	H ₂ SO ₄ = sulfuric acid
AOS = alternative operating scenario	HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
AP-42 = Air Pollutant Emission Factors, 5th edition	HC = hydrocarbons
APD = Air Permits Division	HCl = hydrochloric acid, hydrogen chloride
API = American Petroleum Institute	Hg = mercury
APWL = air pollutant watch list	HGB = Houston/Galveston/Brazoria
BPA = Beaumont/ Port Arthur	hp = horsepower
BACT = best available control technology	hr = hour
BAE = baseline actual emissions	IFR = internal floating roof tank
bbl = barrel	in H ₂ O = inches of water
bbl/day = barrel per day	in Hg = inches of mercury
bhp = brake horsepower	IR = infrared
BMP = best management practices	ISC3 = Industrial Source Complex, a dispersion model
Btu = British thermal unit	ISCST3 = Industrial Source Complex Short-Term, a dispersion model
Btu/scf = British thermal unit per standard cubic foot or feet	K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
CAA = Clean Air Act	LACT = lease automatic custody transfer
CAM = compliance-assurance monitoring	LAER = lowest achievable emission rate
CEMS = continuous emissions monitoring systems	lb = pound
cfm = cubic feet (per) minute	hp = horsepower
CFR = Code of Federal Regulations	hr = hour lb/day = pound per day
CN = customer ID number	lb/hr = pound per hour
CNG = compressed natural gas	lb/MMBtu = pound per million British thermal units
CO = carbon monoxide	LDAR = Leak Detection and Repair (Requirements)
COMS = continuous opacity monitoring system	LNG = liquefied natural gas
CPMS = continuous parametric monitoring system	LPG = liquefied petroleum gas
DFW = Dallas/ Fort Worth (Metroplex)	LT/D = long ton per day
DE = destruction efficiency	m = meter
DRE = destruction and removal efficiency	m ³ = cubic meter
dscf = dry standard cubic foot or feet	m/sec = meters per second
dscfm = dry standard cubic foot or feet per minute	MACT = maximum achievable control technology
ED = (TCEQ) Executive Director	MAERT = Maximum Allowable Emission Rate Table
EF = emissions factor	MERA = Modeling and Effects Review Applicability
EFR = external floating roof tank	mg = milligram
EGU = electric generating unit	mg/g = milligram per gram
EI = Emissions Inventory	mL = milliliter
ELP = El Paso	MMBtu = million British thermal units
EPA = (United States) Environmental Protection Agency	MMBtu/hr = million British thermal units per hour
EPN = emission point number	MSDS = material safety data sheet
ESL = effects screening level	MSS = maintenance, startup, and shutdown
ESP = electrostatic precipitator	MW = megawatt
FCAA = Federal Clean Air Act	NAAQS = National Ambient Air Quality Standards
FCCU = fluid catalytic cracking unit	NESHAP = National Emission Standards for Hazardous Air Pollutants
FID = flame ionization detector	NGL = natural gas liquids
FIN = facility identification number	NNSR = nonattainment new source review
ft = foot or feet	NO _x = total oxides of nitrogen
ft/sec = foot or feet per second	
g = gram	
gal/wk = gallon per week	
gal/yr = gallon per year	
GLC = ground level concentration	

NSPS = New Source Performance Standards
 PAL = plant-wide applicability limit
 PBR = Permit(s) by Rule
 PCP = pollution control project
 PEMS = predictive emission monitoring system
 PID = photo ionization detector
 PM = periodic monitoring
 PM = total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
 PM₁₀ = total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 POC = products of combustion
 ppb = parts per billion
 ppm = parts per million
 ppmv = parts per million (by) volume
 psia = pounds (per) square inch, absolute
 psig = pounds (per) square inch, gage
 PTE = potential to emit
 RA = relative accuracy
 RATA = relative accuracy test audit
 RM = reference method
 RVP = Reid vapor pressure
 scf = standard cubic foot or feet
 scfm = standard cubic foot or feet (per) minute
 SCR = selective catalytic reduction
 SIL = significant impact levels
 SNCR = selective non-catalytic reduction
 SO₂ = sulfur dioxide
 SOCM = synthetic organic chemical manufacturing industry
 SRU = sulfur recovery unit
 TAC = Texas Administrative Code
 TCAA = Texas Clean Air Act
 TCEQ = Texas Commission on Environmental Quality
 TD = Toxicology Division
 TLV = threshold limit value
 TMDL = total maximum daily load
 tpd = tons per day
 tpy = tons per year
 TVP = true vapor pressure
 VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 103832, N166M4, PSDTX1566M1 and GHGPSDTX196M1

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in the special conditions.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to the atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with exception for safety relief valves that discharge to the atmosphere as a result of fire, malfunction, or failure of utilities provided that:
 - A. Each valve is equipped with a rupture disc upstream,
 - B. A pressure-sensing device is installed between the relief valve and rupture disc to monitor disc integrity, and
 - C. All leaking discs are replaced at the earliest opportunity but no later than the next process shutdown.

Federal Program Applicability

3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60): **(10/20)**
 - A. Subpart A, General Provisions.
 - B. Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
 - C. Subpart VV Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced after January 5, 1981, and on or before November 7, 2006.
 - D. Subpart DDD, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry
 - E. Subpart IIII, Stationary Compression Ignition Internal Combustion Engines.
4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61: **(10/20)**
 - A. Subpart A, General Provisions
 - B. Subpart FF, Benzene Waste Operations

Special Conditions

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5. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63: **(07/20)**
 - A. Subpart A, General Provisions.
 - B. Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing
 - C. Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines.
 - D. Subpart DDDDD, Industrial, Commercial, and Institutional Boilers and Process Heaters.

Leak Detection and Repair Monitoring Program

6. Piping, Valves, Pumps, Agitators, and Compressors - Intensive Directed Maintenance in VOC or HAP Service - 28LAER **(10/20)**

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The requirements of paragraphs F and G shall not apply:
 - (1) Where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68 degrees Fahrenheit (°F); or
 - (2) Operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure.Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

 - (1) Piping and instrumentation diagram (PID);
 - (2) A written or electronic database or electronic file;
 - (3) Color coding;
 - (4) A form of weatherproof identification; or
 - (5) Designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves

may be identified by one or more of the methods described in subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.

- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Connectors and components in heavy liquid service shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. In addition, all connectors, with the exception of heavy liquids, shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program in accordance with items F thru J of this special condition.

In lieu of the monitoring frequency specified above, connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

The percent of connectors leaking used in paragraph B shall be determined using the following formula:

$$(CI + Cs) \times 100/Ct = Cp$$

Where:

CI = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.

Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe to monitor connectors.

Cp = the percentage of leaking connectors for the monitoring period.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open-ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period:

- (1) A cap, blind flange, plug, or second valve must be installed on the line or valve; or

- (2) The open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open-ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

- F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Non-accessible valves shall be monitored by leak-checking for fugitive emissions at least annually using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or

repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown, equipment clearing and startup as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I) or 500 pounds whichever is greater, the Texas Commission on Environmental Quality (TCEQ) Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

- I. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- J. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), and does not constitute approval of alternative standards for these regulations.
- K. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

- L. The percent of valves leaking used in paragraph K shall be determined using the following formula:

$$(V_l + V_s) \times 100 / V_t = V_p$$

Where:

V_l = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

V_s = the number of valves for which repair has been delayed and are listed on the facility shutdown log.

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V_t = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe to monitor valves.

V_p = the percentage of leaking valves for the monitoring period.

- M. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the repair and replacement requirements contained in this special condition.
- N. Initial component identification and monitoring shall occur within 180 days of initial startup.

Carbon Compound Waste Streams

- 7. Except as may be provided for in the special conditions and/or authorized by this permit, all Unit 40 and Unit 41 waste gas from point sources containing VOC and/or other organic compounds (hydrocarbons and/or hydrocarbon derivatives excluding carbon dioxide) shall be routed to the permitted flare (EPN 42-97-9610). The flare shall operate in accordance with Special Condition No. 12 when disposing of the carbon compounds captured by the collection system. **(07/20)**

The following facilities and waste streams are excluded from this requirement:

- A. Storage tank vents, wastewater streams, cooling tower exhaust, process fugitives, and uncontrolled atmospheric MSS emissions.
- B. During the regeneration process, the fourteen (14) treater (two ethylene, two hexene, four recycle isobutane, four olefin free isobutane, and two de-ethanizer overhead treaters) waste streams shall be routed to the flare (EPN: 42-97-9610) which is operated in accordance with Special Condition Nos. 12-13, and/or vapor destruction unit (VDU) (EPN 42-97-9620) which is operated in accordance with Special Condition No. 14.
- C. Any other exception to this condition requires prior review and approval by the TCEQ Executive Director, and such exceptions may be subject to strict monitoring requirements. **(10/2015)**

Storage and Loading of VOC

- 8. Unit 40 and 41 storage tanks (EPNs TK--01, EMG-ENGTK-1 EMG-ENGTK2, EMG-ENGTK-3, FWP-ENGTK, 42-95-0421, 42-95-0422) are subject to the following requirements: The control requirements specified in paragraphs A.-D. of this condition shall not apply: where the VOC has an aggregate partial pressure of less than 0.5 psia at the maximum expected operating temperature; or to storage tanks smaller than 25,000 gallons. Paragraphs A-H do not apply to pressure vessels or to tanks equipped with vapor recovery systems.
 - A. An internal floating deck or "roof" or equivalent control shall be installed in all tanks. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - (1) A liquid-mounted seal,
 - (2) Two continuous seals mounted one above the other, or

- (3) A mechanical shoe seal.

Installation of equivalent control requires prior review and approval by the Executive Director of the TCEQ.

- B. An open-top tank containing a floating roof (external floating roof tank) which uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof tank provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal, and the secondary seal is rim-mounted. A weather-shield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.
- C. For any tank equipped with a floating roof, the holder of this permit shall follow 40 CFR § 60.113b, Testing and Procedures, to verify seal integrity. Additionally, the permit holder shall follow 40 CFR § 60.115b, Reporting and Recordkeeping Requirements, to provide records of the dates seals were inspected, seal integrity, and corrective actions taken.
- D. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650, or an equivalent degree of flotation, except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
- E. Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks without a floating roof must be equipped with permanent submerged fill pipes.
- F. For purposes of assuring compliance with VOC emission limitations, the holder of this permit shall maintain a monthly emissions record which describes calculated emissions of VOC from all storage tanks and loading operations. The record shall include tank or loading point identification number, control method used, tank or vessel capacity in gallons, name of the material stored or loaded, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, and VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures. These records shall be maintained at the plant site for at least two years and be made available to representatives of the TCEQ upon request.
- G. If throughput records are specified in the special conditions of this permit, the holder of this permit may keep such records in lieu of the records required in paragraph F.

Emissions for tanks and loading operations shall be calculated using:

- (1) AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids"; and
- (2) The TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."
- H. Operation without visible liquid leaks or spills shall be maintained at all loading/unloading facilities, regardless of vapor pressure. This does not apply to momentary dripping associated with the initial connection or disconnection of fittings. Sustained dripping from fittings during loading/unloading operations is not permitted. Any liquid spill that occurs during loading/unloading activities shall be reported pursuant to 30 TAC §§ 101.201, 101.211, and 101.221 and shall be cleaned up immediately to minimize air emissions.

Operational Parameters

9. Fuel for combustion devices at this facility is limited to sweet natural gas containing no more than 0.25 grain of hydrogen sulfide and 5 grains of total sulfur per 100 dscf.
10. Total VOC emitted from Unit 40 and Unit 41 to the atmosphere after the extruder through product loadout shall not exceed 35.08 pounds of VOC/million (MM) pounds of polyethylene pellets on a 12-month rolling basis. For Unit 40 this includes emissions from the Pellet Dewatering Dryer, Pellet Surge Hopper, Off-Spec Silos, Storage Silos, and Loadout (EPNs: 40-25-6300, 40-25-6301, 40-35-6310, 40-35-8021, 40-35-80LO, and 40-35-8011A/B/C). For Unit 41 this includes emissions from the Pellet Dewatering Dryer, Pellet Surge Hopper, Off-Spec Silos, Storage Silos, and Loadout (EPNs: 41-25-6301, 41-25-6310, 41-35-8021, 41-35-80LO, and 41-35-8011A/B/C). **(07/20)**
11. The extruder feed hopper vents from units 40 and 41 shall be controlled by the thermal oxidizer as required by Special Condition No. 15. within 18 months of issuance of amended permit 103832, TCEQ project number 301495. **(07/20)**
12. The Unit 40 and 41 flare (EPN 42-97-9610) shall be designed and operated in accordance with the following requirements: **(07/20)**
 - A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions or an alternate approved by the EPA.
 - B. The heating value and velocity requirements shall be satisfied during operations authorized by this permit or an alternate approved by the EPA. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office (or is required per NSPS Subpart) to demonstrate compliance with these requirements.
 - C. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications
 - D. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.
 - E. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition (total VOC or Btu content) to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.
 - F. The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §60.18(f)(4) shall be recorded at least once every 15 minutes. (n/a if calorimeter used) Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit application (PI-1 dated June 19, 2012).

13. The high-pressure stages of ground flare (EPN: 42-97-9610) shall be designed and operated in accordance with the design, operating, monitoring, recordkeeping, and reporting requirements of AMOC No.31. The permit holder shall attach a copy of AMOC No. 31 to this permit. **(07/20)**
14. The vapor destruction unit (VDU) (EPN: 42-97-9620) shall be designed and operated in accordance with the following requirements:
 - A. The VDU shall achieve 99% control of the waste streams from one or more of the fourteen (14) treaters (two ethylene, two hexene, four recycle isobutane, four olefin free isobutane, and two de-ethanizer overhead treaters) directed to it during the regeneration process. The VDU system shall be designed and operated such that the combined assist natural gas and waste stream must be a minimum of 300 BTU/scf under normal and maintenance flow conditions.
 - B. Quality assured (or valid) data must be generated when the VDU is operating except during the performance of a daily zero and span check and calibration. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VDU operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
 - C. The VDU shall be operated in compliance with the opacity limitations of §111.111(a)(1)(B) during all times when a waste stream is directed to it. An observation of opacity from the VDU shall be conducted in accordance with §111.111(a)(1)(F) while the control device is operating and occur at least once during each calendar quarter unless the VDU does not operate for the entire quarter.
 - D. The VDU shall have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated or have a calibration check performed at a frequency in accordance with, the manufacturer's specifications.

- E. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition (total VOC, N₂ and Btu content) to the VDU.
- (1) The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the VDU inlet such that the total vent stream is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.
 - (2) The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg;
 - (3) Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9.
 - (4) The monitors and analyzers shall operate as required by this section at least 95% of the time when the VDU is operational, averaged over a rolling 12-month period.
 - (5) Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit amendment application (PI-1 dated January 27, 2015). (10/2015)
 - (6) The VDU (EPN: 42-97-9620) shall be designed and operated in accordance with the design, operating, monitoring, recordkeeping, and reporting requirements of AMOC No. 97. The permit holder shall attach a copy of AMOC No. 97 to this permit.
15. Thermal Oxidizer (EPN: TOX) shall be designed and operated according to the following requirements: **(07/20)**
- A. The thermal oxidizer shall achieve at least 99.9% or a 10 ppmv outlet concentration at 3% oxygen as demonstrated by the initial compliance determination required by Special Condition No. 35;
 - B. The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F on a six-minute average while waste gas is being fed into the oxidizer prior to initial stack testing. After the initial stack test has been completed, the six-minute average firebox exit temperature shall be equal to, or greater than the respective hourly average maintained during the most recent satisfactory stack testing required by Special Condition No.35.
 - C. The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^\circ\text{C}$.

- D. Quality assured (or valid) data must be generated when the thermal oxidizer is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the thermal oxidizer operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded.
 - E. Emissions of NO_x shall not exceed 0.06 lb/MMBtu (1-hr average) for thermal oxidizer, based on higher heating value of the combined assist gas/waste gas stream as demonstrated per the requirements of SC No. 35.
16. The permit holder shall maintain an emissions record which includes calculated emissions of SO₂ released from Unit 40 and 41 HEPA Activator Filter A/B (EPNs 40-35-1014 and 40-35-1114) at the site during the previous calendar month and the past consecutive 12-month period. The record shall include catalyst activator identification number, activation hours, mass of catalyst per batch. **(01/19)**

Particulate Matter Control

17. Unit 40 and 41 vent filters and sources are authorized by this permit on the Attachment 1. **(01/19)**
18. Vent filters operation shall be limited to the following:
- A. Particulate matter emissions shall not exceed 0.01 grain per dry standard cubic foot (dscf) of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method 22.
 - B. The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents shall be inspected for visible emissions once per day, and a spare parts filter inventory shall be maintained on site. All inspections and maintenance performed shall be recorded. When there are visible emissions from any one filtered vent, the operation associated with that particular filtered vent shall be isolated and shut down in a timely and orderly manner. The isolated filter system shall be tested and inspected. Failed or damaged parts shall be repaired or replaced.
 - C. The pressure in each baghouse that vents to the atmosphere shall be continuously monitored and recorded at least once an hour. In consideration of operational factors including results of the daily inspections required by Paragraph A., the permit holder may determine for each baghouse the pressure values that would indicate operational failure resulting in emissions of particulate matter to the atmosphere. When available, these pressure values may be used in lieu of the daily inspections as indicators of baghouse operational failure. The list of baghouses and their respective failure pressures shall be maintained in the facility record on-site and made available to the TCEQ upon request.
 - D. Each pressure monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 0.5 inches water gauge pressure or 0.5 percent of span (1-inch water gauge pressure or 2% of span for scrubbers and cyclones).
 - E. Quality assured (or valid) data must be generated when the facility generating emissions is operating except during the performance checks. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or

calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the facility generating emissions operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

Cooling Towers

19. The cooling tower (EPN 42-05-9201) shall be operated and monitored in accordance with the following:

- A. The VOC associated with cooling tower water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12-month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

The monitoring method and calculation in 30 TAC Chapter 115, Subpart H, Division 2 can be used as an acceptable alternative.

Whenever a cooling tower leak is detected resulting in unauthorized emissions, action shall be taken as soon as possible to locate the leak. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit where the leak occurs and no later than one year from the date on which the leak is first detected. The cause of any leak and all repairs shall be recorded.

- B. Cooling towers shall each be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs. **(01/19)**
- C. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀, and PM_{2.5} as represented in the permit application calculations. **(01/19)**
- D. Cooling towers shall be analyzed for particulate emissions using one of the following methods: **(01/19)**
- (1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or
 - (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per $\mu\text{mho/cm}$ or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or
 - (3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity

ratios determined using D (2) above provided the highest ratio is not more than 10% larger than the smallest ratio.

- (4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.
- E. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods. **(01/19)**
 - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) The analysis method for conductivity shall be either ASTM D1125-14 Test Method A (field or routine laboratory testing) or ASTM D1125-14 Test Method B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
 - (3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director.
 - (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- F. Emission rates of PM, PM₁₀ and PM_{2.5} shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly. **(01/19)**

Fire Water Pump Engine (01/19)

20. Fuel used for the firewater pump engines (EPN 87-97-1510) shall be ultra-low sulfur diesel. Operation of each engine is limited to a total of 100 hours per year of non-emergency operation. Operational records to demonstrate compliance with this condition shall be kept on site for five years.

Emergency Engines

21. The following requirements apply to the emergency generators (EPNs: EMG-ENG1, EMG-ENG2, EMG-ENG3): **(07/20)**
 - A. Fuel for each generator shall be limited to ultra-low sulfur diesel (ULSD) containing no more than 15 ppmw total sulfur.
 - B. Each generator shall be limited to 100 hours per year during non-emergency situations.
 - C. Each generator shall be equipped with a non-resettable hour meter.

Wastewater

22. Process wastewater shall be immediately directed to a covered system. All lift stations, manholes, junction boxes, conveyances, and other wastewater facilities shall be covered to minimize emissions. **(07/20)**

Maintenance, Start-Up and Shutdown Operations

23. Planned startup and shutdown emissions due to the activities identified in Special Condition No. 24 are authorized by this permit from facilities and emission points identified in this permit's MAERT, in Attachments A, B, C, or in Special Condition 31 of this permit.
24. This permit authorizes emissions from the following facilities used to support planned MSS activities (Attachments A, B, C) at permanent site facilities: frac tanks, containers, vacuum trucks, facilities used for abrasive blasting, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities listed in Attachment C, and (c) does not operate as a replacement for an existing authorized facility.

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

25. Process units and facilities, with the exception of those identified in Special Conditions 27, 29 and Attachment A shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
 - B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
 - C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
 - D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - (1) For MSS activities identified in Attachment B, the following option may be used in lieu of (ii) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
 - (2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the

requirements of Special Condition 26. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

- E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:

- (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
- (2) There is not an available connection to a plant control system (flare).
- (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Paragraph E. of this condition must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment B.

26. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.

- A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:

- (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate response factor shall be recorded.
- (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. The highest measured VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.

- (1) The air contaminant concentration measured is less than 80 percent of the range of the tube. If the maximum range of the tube is greater than the release concentration defined in (iii), the concentration measured is at least 20 percent of the maximum range of the tube.
- (2) The tube is used in accordance with the manufacturer's guidelines.
- (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration

Where the release concentration is:

10,000 * mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

- C. Lower explosive limit measured with a lower explosive limit detector.
- (1) The detector shall be calibrated monthly with a certified propane gas standard at 25% of the lower explosive limit (LEL) for propane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
 - (2) A daily functionality test shall be performed on each detector using the same certified gas standard used for calibration. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
 - (3) A certified methane, ethylene, or pentane gas standard equivalent to 25% of the LEL for propane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.
27. This permit authorizes emissions from EPN MSS-MISC and MSS-CONT for the storage tanks identified in the attached facility list during planned floating roof landings. Tank roofs may only be landed for changes of tank service or tank inspection/maintenance as identified in the permit application. Emissions from change of service tank landings, for which the tank is not cleaned and degassed, shall not exceed 10 tons of VOC in any rolling 12-month period. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.
- A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the maximum extent practicable without entering the tank. Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. This requirement does not apply where the vapor under a floating roof is routed to control or a controlled recovery system during this process.
 - B. If the VOC partial pressure of the liquid previously stored in the tank is greater than 0.50 psi at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin within 24 hours after the tank has been drained unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning. Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC partial pressure of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under landed roofs shall be completed as follows:

- (1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.
 - (2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
 - (3) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 26.
 - (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.
 - (5) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
- C. The tank shall not be opened or ventilated without control, except as allowed by (i) or (ii) below in part D until one of the criteria in part D of this condition is satisfied.
- Minimize air circulation in the tank vapor space.
- (1) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
 - (2) Access points shall be closed when not in use
- D. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.
- (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
 - (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:

- (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A, Appendix 1.
 - (b) Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).
 - (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 26.
- (3) No standing liquid verified through visual inspection.
The permit holder shall document the method (i)-(iii) used to determine that uncontrolled ventilation criteria were satisfied.
- E. Tanks shall be refilled as rapidly as practicable until the roof is off its legs, with the following exceptions:
 - (1) Only one tank with a landed roof can be filled at any one time, at a rate not to exceed 400 gallons per minute (gpm).
 - (2) The vapor space below the tank roof is directed to a control device when the tank is re-filled until the roof is floating on the liquid. The control device used, and the method and locations used to connect the control device shall be recorded. All vents from the tank being filled must exit through the control device.
- F. The occurrence of each roof landing and the associated emissions shall be recorded, and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:
 - (1) The identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;
 - (2) The reason for the tank roof landing;
 - (3) For the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
 - (a) The roof was initially landed,
 - (b) All liquid was pumped from the tank to the extent practical,
 - (c) Start and completion of controlled degassing, and total volumetric flow,
 - (d) All standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi,
 - (e) If there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow,
 - (f) Refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and
 - (g) Tank roof off supporting legs, floating on liquid;
 - (4) The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The

emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application.

- G. Only one Unit 81 1-hexene storage tank (EPNs: TK-1HEX, TK-1HEX2, or TK-1HEX3) shall undergo MSS in a given hour. Emissions from tank MSS controlled degassing shall not occur for more than 250 hours per year.
28. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
- A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
 - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
 - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
 - (2) Equip fill line intake with a "duckbill" or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a "duckbill" or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 26.A or B.
 - C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
 - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12-month vacuum truck emissions shall also be determined on a monthly basis.
 - E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in

the permit application. The recordkeeping requirements in paragraphs A. through D. of this condition do not apply.

29. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities.
- A. The exterior surfaces of vessels exposed to the sun shall be white or aluminum. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.
 - B. The vessels must be covered and equipped with fill pipes that discharge within 6 inches of the vessel bottom.
 - C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
 - D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12-month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."
 - E. If the vessel is used to store liquid with VOC partial pressure less than 0.10 psi at 95°F, records may be limited to the days the tank is in service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.
 - F. Emissions from frac tanks shall be controlled by a carbon adsorption system (CAS) as required in Special Condition No. 32 when loading material with a true vapor pressure greater than 0.5 psia. **(07/20)**
30. Additional occurrences of MSS activities authorized by this permit (see Attachment A, B, and C) may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.
31. All permanent facilities must comply with all applicable operating requirements, limits, and representations in this permit during planned startup and shutdown unless alternate requirements and limits are identified. Alternate requirements for emissions from routine emission points are identified below.
- A. Combustion units, with the exception of flares, at this site are exempt from NO_x and CO-operating requirements identified in special conditions in other NSR permits during planned startup and shutdown if the following criteria are satisfied.
 - (1) The maximum allowable emission rates in the permit authorizing the facility are not exceeded.

- (2) The startup period does not exceed 8 hours in duration and the firing rate does not exceed 75 percent of the design firing rate. The time it takes to complete the shutdown does not exceed 4 hours.
 - (3) Control devices are started and operating properly when venting a waste gas stream.
 - B. A record shall be maintained indicating the start and end times at which each of the activities identified above occur and documentation that the requirements for each have been satisfied.
- 32. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device. **(07/20)**
 - A. Carbon Adsorption System (CAS).
 - (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
 - (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
 - a. It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
 - b. The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of an MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.
 - (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition No. 26.
 - (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
 - (5) Records of CAS monitoring shall include the following:
 - a. Sample time and date.
 - b. Monitoring results (ppmv).
 - c. Canister replacement log.

- (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.
 - B. Temporary Vapor Combustor (EPN: MSS-TKCONT & MSS-CONT).

The vapor combustor unit shall provide no less than 99 percent DRE control of the waste gas directed to it or allow a VOC exit stream concentration of no greater than 10 ppmv, dry corrected to 3 percent oxygen. This may be demonstrated by maintaining the vapor combustor firebox exit temperature at not less than 1600°F with waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the combustor.

The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^\circ\text{C}$.
 - C. Temporary Flare (EPN: MSS-TKCONT & MSS-CONT)

The temporary flare shall provide no less than 98 percent DRE control of the waste gas directed to it. The temporary flare shall be designed and operated in accordance with the following requirements:

 - (1) The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under maintenance flow conditions.
 - (2) The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.
 - (3) The flare shall be operated with a flame present at all times and/or have a constant pilot flame when VOCs are directed to the flare. The pilot flame shall be continuously monitored by a thermocouple, infrared monitor, or ultraviolet monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated or have a calibration check performed at a frequency in accordance with, the manufacturer's specifications.
 - (4) The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.
 - D. Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through the plant flare system meeting the requirements contained in Special Condition 12 of this permit.
33. No visible emissions shall leave the property due to abrasive blasting. Black Beauty and Garnet Sand may be used for abrasive blasting. The permit holder may also use blast media that meet the criteria below: **(10/20)**
- A. The media shall not contain asbestos or greater than 1.0 weight percent crystalline silica.

- B. The weight fraction of any metal in the blast media with a short-term effects screening level (ESL) less than 50 micrograms per cubic meter as identified in the most recently published TCEQ ESL list shall not exceed the $ESL_{\text{metal}}/1000$.
- C. The MSDS for each media used shall be maintained on site.
Blasting media usage and the associated emissions shall be recorded each month and the rolling 12-month total emissions updated.
- D. All spent dry abrasive blast media shall be collected daily from each abrasive blasting area and placed in an enclosed container.
- E. All spent dry abrasive blast media located within each shrouded area (EPN SAND-01) shall be collected and placed into either an enclosed container or an enclosed building immediately after the relocation of the (vessel, barge, platform, steel structure, etc.) from within the shrouded area where abrasive blasting occurred.
- F. All spent dry abrasive blast media located outside the shrouded area where abrasive blasting occurred shall be collected daily and placed in either an enclosed container, in an enclosed building, or in a pile that is covered with either a tarp or shroud material to prevent wind erosion. The tarp or shroud material that is used to cover piles shall not have any holes or tears which would allow the leakage of PM.
- G. Waste material collected in the abrasive cleaning and recovery system shall be disposed of in a manner that will prevent the material from becoming airborne.
- H. Spent dry abrasive blast media that is not reused shall be removed from the plant site in accordance with all applicable waste rules.
- I. All filters used for the control of PM from the abrasive blasting operation shall be removed and disposed in such a manner that minimizes trapped PM from escaping into the atmosphere.

Compliance Assurance Monitoring (CAM) Requirements

- 34. The following requirements apply to waste gas capture systems for the Flare (EPN 42-97-9610), and VDU (EPN 42-97-9620),
 - A. If the control device does not have a bypass, comply with either of the following requirements:
 - (1) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - (2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - B. If there is a bypass for the control device, comply with either of the following requirements:
 - (1) Install a flow indicator that records and verifies zero flow at least once every 15 minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly to the atmosphere or

- (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

Equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines are not considered bypasses, a deviation shall be reported if the monitoring or inspections indicate bypass of the control device.

- C. If any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Records of the inspection, monitoring, and corrective action shall be maintained and kept at the site and made available to TCEQ representatives upon request. **(10/2015)**

Initial Determination of Compliance

35. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Catalyst Activator Heater vents (EPNs 40-36-1013, 41-36-1113), Pellet Dewatering Dryers (EPNs 40-25-6301, 41-25-6301), Surge Hopper Filters (EPNs 41-35-6310, 40-35-6310), Vapor Destruction Unit (EPN 42-97-9620) and thermal oxidizer (EPN TOX) to demonstrate compliance with the MAERT limits for the contaminants listed in Section B of this condition. Testing for the VDU must also demonstrate compliance with the represented VOC destruction rate effectiveness. **(07/20)**

The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

Requests to waive testing for any pollutant or control device specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. As appropriate, any test waivers or alternate procedures must also comply with 30 Texas Administrative Code, Subchapter 115, §115.725 (relating to Highly Reactive Volatile Organic Compounds, Monitoring and Testing Requirements). Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
 - (1) Proposed date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.
 - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.

- (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants emitted from the Catalyst Activator Heater vents (EPNs 40-36-1013, 41-36-1113) to be tested for are NO_x and CO. Air contaminants emitted from the Pellet Dewatering Dryers (EPNs 41-25-6301, 40-25-6301, 40-25-6300), and Surge Hopper Filters (EPNs 41-35-6310, 40-35-6310) to be tested for are VOCs. Air contaminants emitted from the Vapor Destruction Unit (EPN 42-97-9620) to be tested for are NO_x, CO, and VOCs. Air contaminants emitted from the thermal oxidizer (EPN: TOX) to be tested for are VOC, NO_x, CO, and O₂. Testing for additional air contaminants not specified in this section may be required by the appropriate TCEQ regional office.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities or increase in production, and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate at maximum polyethylene production and heater firing rates during stack emission testing. These conditions/ parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/ parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the polyethylene production rate exceeds by 5% or greater the maximum 1-hour average production rate achieved during the most recent satisfactory stack test or the catalyst activation heater firing rate is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

- F. Sampling ports and platforms shall be incorporated into the design of the facility being sampled according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director. **(10/18)**

Ongoing Determination of Compliance

36. Ongoing compliance with VOC emission limits for the polyethylene pellet handling systems between each extruder and product loadout (inclusive) shall be determined by calculation using monthly production rates and monthly average VOC concentrations derived as results of sampling the polyethylene products for residual VOC at the following two locations:

- (A) At the scalping screen after the dryer; and
- (B) At final product loading.

An acceptable head space test for VOC shall be used to determine the residual VOC at each location. Monthly average results shall be based on a minimum of three samples at each location. Separate samples are required for each product type produced during the month.

The permit holder may develop an average value of "lb VOC/MM lb product" for each product type. The average value of this parameter for each product type shall be derived from no less than 10 sample sets at each of locations (A) and (B) specified above, with each set comprised of no less than 3 individual samples.

When available upon derivation as indicated, the average value may be used in lieu of the monthly sampling schedule and its results to demonstrate compliance with applicable VOC emission rate limits.

For each product in production, the average value shall be verified on a quarterly basis by the indicated derivation methods and sample sizes.

Polymer production rates, types and monitoring records will be maintained at the plant site and shall include (but are not necessarily limited to):

- A. Day and time of sample
- B. Actual plant production rate at the time of sampling
- C. Monthly production rate
- D. Product number
- E. Polymer handling emissions calculated as concentration (A) - concentration (B) multiplied by monthly production

Recordkeeping Requirements

37. All records required by the conditions of this permit shall be kept at the plant site for a minimum of five years and made available to TCEQ representatives upon request. Monthly production shall be recorded to indicate the pounds of polyethylene produced year-to-date. The monthly average pounds of VOC per MM pounds of product resulting from the headspace tests shall be recorded each month. **(01/19)**

The following requirements apply to these PM filter systems on Attachment 1: **(01/19)**

- A. An observation of visible emission from stationary vents units which are required to comply with 30 TAC 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter. Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset.
- B. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- C. Records of all observations shall be maintained and kept at the site, and made available to TCEQ representatives upon request.

Offsets for Emissions Increases Initial Nonattainment New Source Review (NNSR) permit N166M2

38. Nonattainment New Source Review (NNSR) Permit No. N166M2 (TCEQ Project No. 301495) is issued based on the requirement that the permit holder offset the project emission increase for facilities authorized by this permit prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H. **(07/20)**
- A. The permit holder shall use 176.0 tons per year (tpy) of VOC credits (ERCs) from TCEQ credit certificate numbers 2703, 2706, 2800, 2870, 3446, 3498, and 3499 to offset the 135.34 tpy VOC project emission increase for the facilities authorized by this permit at a ratio of 1.3 to 1.0.
 - B. The permit holder shall use 129.7 tpy of NO_x credits to offset the 99.68 tpy NO_x project emission increase for the facilities authorized by this permit at a ratio of 1.3 to 1.0.
 - (1) The permit holder shall use 126.9 tpy of NO_x ERCs from TCEQ credit certificate numbers 2701, 2704, 2833, 2839, 2840, 3155, 3266, 3436, 3452, 3500, 3525 and 3527 to offset the 97.58 tpy NO_x project emission increase for the facilities authorized by this permit at a ratio of 1.3 to 1.0.
 - (2) The permit holder shall use 2.8 tpy of Mass Emission Cap and Trade (MECT) allowances to offset the 2.1 tpy NO_x project emission increase for the following MECT facilities authorized by this permit at a ratio of 1.3 to 1.0:
 - EPN 40-36-1013: Unit 40 Catalyst Activator Heater
 - EPN 40-36-1113: Unit 41 Catalyst Activator Heater

Additional Greenhouse Gases Special Conditions

39. Any calculation for carbon dioxide equivalent (CO_{2e}) emission rates required by this permit shall employ Global Warming Potential (GWP) contained in Greenhouse Gas Regulations, 40 CFR Part 98, Subpart A, Table A-1, as amended on December 11, 2014 (79 FR 73779). **(07/20)**

40. Where a methodology of 40 CFR Part 98 is referenced in this permit, such reference method shall be modified as follows: **(07/20)**

- A. References to annual measurements shall be construed as rolling 12-month totals if the relevant parameter is measured on a monthly or more frequent basis.
- B. References to annual measurements that are not measured at a frequency greater than one month (e.g. quarterly or semiannual) shall be construed as the average of the most recent measurements based on a rolling 12-month period (e.g. average of 4 quarterly or 2 semiannual measurements).

41. The combustion devices are subject to the following requirements. **(07/20)**

EPN	Facilities
40-36-1013	Unit 40 Catalyst Activator Heater
41-36-1013	Unit 41 Catalyst Activator Heater

- A. Rolling 12-month CO_{2e} emissions shall be calculated each month using the methods provided at 40 CFR § 98.33(a).

The higher heating value (HHV) of the fuel shall be determined and recorded on a semiannual basis following procedures provided at 40 CFR § 98.34(a)(6).

The carbon content of the fuel shall be determined and recorded on a semiannual basis following the procedures provided at 40 CFR § 98.34(b)(3).

- B. The permit holder shall install, calibrate, maintain, and operate a continuous fuel flow monitor and record the average hourly fuel gas consumption of each combustion device. Fuel flow meters shall be calibrated as provided for at 40 CFR § 98.34(b)(1).

42. Total rolling 12-month CO_{2e} emissions from the following control devices shall be calculated on a monthly basis as provided for at 40 CFR 98.33 (a)(1)(i). **(07/20)**

EPN	Facilities
42-97-9610	Ground flare
VDU	Vapor Destruction Unit
TOX	Thermal Oxidizer

43. Emergency Diesel Generators (EPNs: EMG-ENG1, EMG-ENG2, EMG-ENG3) are subject to the following requirements: **(07/20)**

- A. Rolling 12-month CO_{2e} emissions shall be calculated each month using the methods provided at 40 CFR § 98.33(a).

44. Emissions from equipment leaking components (EPN: FUG-01) shall be monitored as follows: **(07/20)**

Special Conditions

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- A. All components in natural gas services shall be inspected by audio, visual, and/or olfactory (AVO) means at least weekly by operating personnel walk-through.
 - B. Total rolling 12-month CO_{2e} emissions shall be calculated as provided at 40 CFR 98.253(l), except that mass emission rates shall be converted and recorded in units of short tons per year.
45. The permit holder shall comply with all applicable control, monitoring, recordkeeping and MSS activities requirements of this permit and the site-wide MSS requirements to planned MSS activities. **(07/20)**
46. Instruments and monitoring system shall have a minimum 95% on-stream time on an annual basis. **(07/20)**
47. Permit holders must keep records sufficient to demonstrate compliance with 30 Texas Administrative Code § 116.164. Records shall be sufficient to demonstrate the amount of emissions of GHGs from the source as a result of construction, a physical change or a change in method of operation does not require authorization under 30 TAC §116.164(a). **(07/20)**

Unit 81 Special Conditions

48. Special conditions 49 through 70 apply to the sources associated with the Unit 81 1-Hexene Unit. **(10/20)**

Leak Detection and Repair Monitoring Program

49. Except as may be provided for in the Special Conditions of this permit, the requirements of Special Condition No. 6 apply to Unit 81 (EPN: FUG-02): **(10/20)**

Storage and Loading of VOC

50. Tanks TK-1HEX1, TK-1HEX2, and TK-1HEX3 are limited to storing only 1-Hexene. Tank TK-INTOL is limited to storing only intermediate olefins. **(10/20)**
51. Unit 81 storage tanks (EPNs TK-HEX1, TK-HEX2, TK-HEX3, and TK-INTOL) are subject to the following requirements: **(10/20)**
- A. An internal floating deck or "roof" or equivalent control shall be installed in all tanks. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - (1) A liquid-mounted seal,
 - (2) Two continuous seals mounted one above the other, or
 - (3) A mechanical shoe seal.Installation of equivalent control requires prior review and approval by the Executive Director of the TCEQ.
 - B. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and any seal gap measurements specified in Title 40 Code of Federal Regulations § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR

32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates inspection was performed, any measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.

- C. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650, or an equivalent degree of flotation, except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
- D. The tanks shall be designed to completely drain its entire contents to a sump in a manner that limits the volume of free-standing liquid in the tank or the sump as follows:

NPS (in.)	V _U (gal.)
2	9
3	14
4	32
6	75

Where: NPS is the nominal piping size of the sump pipe; and

V_U is the maximum volume of free-standing liquid in the tank or sump.

- E. Tanks shall be constructed or equipped with a connection to a vapor recovery system that routes vapors from the vapor space under the landed roof to a control device.
- F. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes or utilize bottom fill.
- G. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12-month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions from tanks shall be calculated using the methods that were used to determine the MAERT limits in the amendment application, Form PI-1 dated April 18, 2019. Sample calculations from the application shall be attached to a copy of this permit at the plant site.

- 52. For Unit 81 loading operations (EPNs VCU-1, MELT, MELT-TO, LOADRACK, 81-97-9611), the permit holder shall maintain and update a monthly emissions record which includes calculated emissions of VOC from all loading operations over the previous rolling 12-month period. The record shall include the loading spot, control method used, quantity loaded in gallons, name of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date. Records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids at or below ambient temperatures. Emissions shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations." **(10/20)**

Special Conditions

Permit Numbers 103832, N166M4, PSDTX1566M1 and GHGPSDTX196M1

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53. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections. **(10/20)**
54. Tank truck loading emissions shall be vented to the Unit 81 Flare and shall comply with Special Condition 58 during loading operations. Railcar loading emissions shall be vented to the VCU and shall comply with Special Condition 59 during loading operations. Drum loading emissions shall be vented to the Unit 81 MELT TO and shall comply with Special Conditions 61 through 65 during loading operations. **(10/20)**
55. Each tank truck shall be leak checked and certified annually in accordance with Title 40 Code of Federal Regulations Part 63 (40 CFR 63), Subpart R. **(10/20)**

The permit holder shall not allow a tank truck to be filled unless it has passed a leak-tight test within the past year as evidenced by a certificate which shows the date the tank truck last passed the leak-tight test required by this condition and the identification number of the tank truck.

56. In order to ensure 100% capture efficiency during railcar loading, the following requirements must be met: **(10/20)**
 - A. The permit holder shall not allow a railcar to be filled unless it has a current certification in accordance with U.S. Department of Transportation (DOT) pressure test requirements of 49 CFR §173.31. The holder of this permit shall not allow a railcar to be loaded unless it has provided a certificate which shows the date the railcar last passed the leak-tight test required by this condition and the identification number of the railcar. Records of the date on which the testing was performed and the test method used shall be maintained for each railcar loaded.
 - B. Hard-piped or bolted connections, and/or dry lock design hard piped loading arms shall be used for all pressurized loading operations.
 - C. Each railcar to be loaded shall be designed to handle a pressure of 15 psi gauge or greater.
 - D. Each railcar to be loaded shall not be equipped with a spew gauge.
57. The loading into drums shall be splash loaded. Loading shall only be performed within a total enclosure or within a partial enclosure designed and operated with a capture velocity of at least 200 feet per minute at the container vent. The enclosure shall be designed and operated consistent with the specifications in Industrial Ventilation: A Manual of Recommended Practice. Only two drums may be loaded within one hour. Upon completion of the drum filling, the first one hour of cooling of the drum loading product shall be done within a closed vent system. **(10/20)**

Operational Parameters

58. The Unit 81 Flare (EPN 81-97-9611) shall be designed and operated in accordance with the following requirements: **(10/20)**
 - A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to them.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple, infrared monitor, or ultraviolet monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist to the flare.
- D. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition (or Btu content) shall be recorded each hour.

The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit amendment application, PI-1 dated April 18, 2019.

59. Vapor Combustor (EPN VCU-1) shall be designed and operated in accordance with the following requirements: **(10/20)**

- A. The vapor combustor unit (VCU) shall achieve a VOC destruction efficiency of at least 99.9% or a 10 ppmv outlet concentration at 3% oxygen as demonstrated by the initial compliance determination required by Special Condition No. 66 control of the waste gas directed to it. This shall be ensured by maintaining the temperature in, or immediately downstream of, the combustion chamber above 1400°F prior to the initial stack test performed in accordance with Special Condition 66. Following the completion of that stack test, the six-minute average temperature shall be maintained above the minimum one-hour average temperature maintained during the last satisfactory stack test.

- B. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature monitor shall be installed, calibrated or have a calibration check performed at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ± 2 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.
 - C. Quality assured (or valid) data must be generated when the VCU is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VCU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
60. Fuel gas combusted at this facility shall be sweet natural gas containing no more than 2.0 grains of Hydrogen Sulfide or 2 grains of total sulfur per 100 dry standard cubic feet. **(10/20)**
61. The Thermal Oxidizer, EPN MELT-TO, shall achieve a VOC destruction efficiency of at least 99.9% percent or a 10 ppmv outlet concentration at 3% oxygen as demonstrated by the initial compliance determination required by Special Condition No. 66. **(10/20)**
62. The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400 °F on a six-minute average while waste gas is being fed into the oxidizer prior to initial stack testing. After the initial stack test has been completed, the six-minute average temperature shall be equal to, or greater than the respective hourly average maintained during the most recent satisfactory stack testing required by Special Condition No. 66. **(10/20)**
63. The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.
- Quality assured (or valid) data must be generated when the thermal oxidizer is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the thermal oxidizer operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(10/20)**
64. The cooling tower (EPN 81-05-9202) shall be operated and monitored in accordance with the following: **(10/20)**
- A. The VOC associated with cooling tower (EPN 81-05-9202) water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions.

The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12-month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

Whenever a cooling tower leak is detected resulting in unauthorized emissions, action shall be taken as soon as possible to locate the leak. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit where the leak occurs and no later than one year from the date on which the leak is first detected. The cause of any leak and all repairs shall be recorded.

- B. Each cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.0005% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
- C. Total dissolved solids (TDS) shall not exceed 5,500 parts per million by weight (ppmw) during operation. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀, and PM_{2.5} as represented in the permit application calculations.
- D. Cooling water shall be sampled at least once per week for TDS.
- E. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
 - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, and SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) Alternate sampling and analysis methods may be used to comply with E(1) with written approval from the TCEQ Regional Director.
 - (3) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- F. Emission rates of PM, PM₁₀ and PM_{2.5} shall be calculated using the measured TDS, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Compliance Assurance Monitoring

- 65. The following requirements apply to capture systems for the Unit 81 Flare (EPN 81-97-9611), Unit 81 Vapor Combustor Unit (EPN VCU-1), and Unit 81 Thermal Oxidizer (EPN MELT-TO): **(10/20)**
 - A. If the control device does not have a bypass and used to control pollutants other than particulate, either:
 - (1) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - (2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - B. If there is a bypass for the control device, comply with either of the following requirements:

- (1) Install a flow indicator that records and verifies zero flow at least once every 15 minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly to the atmosphere or
- (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

Equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines are not considered bypasses.

A deviation shall be reported if the monitoring or inspections indicate bypass of the control device.

- C. If any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Initial Demonstration of Compliance

66. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Unit 81 Vapor Combustor Unit (EPN VCU-1) and Unit 81 Thermal Oxidizer (EPN MELT-TO) to demonstrate compliance with the MAERT and Special Conditions 58 through 64. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods. **(10/20)**

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
- (1) Proposed date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.
 - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - (7) Procedure/parameters to be used to determine worst case emissions (such as production rate, temperature for incinerators, etc. These set operating parameters to be monitored and operating limits in other permit conditions) during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants emitted from the Unit 81 Vapor Combustion unit (EPN VCU-1) to be tested for include VOC, NO_x, O₂, and CO. Air contaminants emitted from the Unit 81 Thermal Oxidizer (EPN MELT-TO) to be tested for include VOC, NO_x, and CO.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) and at such other times (identify the need for any periodic sampling here) as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate at maximum loading rate during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the loading exceeds by 5% or greater the maximum 1-hour average loading rate achieved during the most recent satisfactory stack test, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
 - One copy to the appropriate TCEQ Regional Office.
 - One copy to each local air pollution control program.
- F. Sampling ports and platform(s) shall be incorporated into the design of (source stack and EPN) according to the specifications set forth in the attachment entitled "Chapter 2, Guidelines For Stack Sampling Facilities" of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

Maintenance, Startup, and Shutdown Operations

- 67. Planned startup and shutdown emissions due to the activities identified in Special Condition 68 are authorized by this permit from facilities and emission points identified in this permit's MAERT, in Attachments A, B, C, or in Special Condition No. 32 of this permit. **(10/20)**
- 68. This permit authorizes emissions from the following facilities used to support planned MSS activities (as listed in Attachments A, B, and C) at permanent site facilities: frac tanks, containers,

vacuum trucks, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities listed in Attachment C, and (c) does not operate as a replacement for an existing authorized facility. The requirements of Special Conditions No. 23 through 33 apply to MSS activities associated with Unit 81. **(10/20)**

Offsets for Emissions Increases Initial Nonattainment New Source Review (NNSR) permit N166M3

69. Nonattainment New Source Review (NNSR) Permit No. N166M3 (TCEQ Project No. 300118) is issued/approved based on the requirement that the permit holder offset the project emission increase for facilities authorized by this permit prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H. **(10/20)**
- A. The permit holder shall use 33.9 tons per year (tpy) of VOC credits to offset the 28.2 tpy VOC project emission increase for the facilities authorized by this permit at a ratio of 1.2 to 1.0.
- B. The permit holder shall use 7.5 tons per year (tpy) of NO_x credits to offset the 6.2 tpy NO_x project emission increase for the facilities authorized by this permit at a ratio of 1.2 to 1.0.
70. Prior to the commencement of operation, the permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number. **(10/20)**

Permits Incorporated by Reference

71. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). These lists are not intended to be all inclusive and can be altered without modifications to this permit. **(10/21)**

Authorization	Source or Activity
PBR Registration No. 164585	Fugitive components for EPN FUG-01
PBR Registration No. 160795	Fugitive components for EPN FUG-01
30 TAC § 106.263 (effective 11/01/2001)	MSS activities for EPN MSSPBR
30 TAC § 106.393 (effective 09/04/2000)	Transloading activities for EPN TRANSLOAD
30 TAC § 106.412 (effective 09/04/2000)	Diesel fueling activities for EPN DSLFUEL
30 TAC § 106.454 (effective 11/01/2001)	Degreasing activities for EPN DG-01
30 TAC § 106.122 (effective 09/04/2000)	Bench scale laboratory equipment

Attachment 1

Permit No. 103832, N166M4, PSDTX1566M1, and GHGPSDTX196M1

Vent filters and sources are listed to the following:

Vent filter identification (EPN)	Sources
40-35-1014	Unit 40 HEPA Activator Filter A/B
40-35-1114	Unit 41 HEPA Activator Filter A/B
41-35-6105	Unit 41 Additive Bag Discharger Filter
40-35-6105	Unit 40 Additive Bag Discharger Filter
41-35-61AD	Unit 41 Additive Hopper Filter A, B, C, D
40-35-61AF	Unit 40 Additive Hopper Filter A, B, C, D, E, F
40-35-6181	Unit 40 Talc Additive Receiver Filter
40-35-6191	Unit 40 Slip Additive Receiver Filter
40-35-6401	Unit 40 Central Vacuum Secondary Filter
40-35-8103	Unit 40 Blower Guard Filter
41-35-6401	Unit 41 Central Vacuum Secondary Filter
40-35-3102	Unit 40 S-1 Catalyst Charge Purge Filter
41-35-3102	Unit 41 PF Catalyst Charge Filter
41-35-6201 41-35-6106	Unit 41 Extruder Feed Hopper Vent and Bypass Filters
40-35-6201 40-35-6106	Unit 40 Extruder Feed Hopper Vent and Bypass Filters
41-35-6310	Unit 41 Pellet Surge Hopper Filter
40-35-6310	Unit 40 Pellet Surge Hopper Filter
40-35-8120	Unit 40 Talc Additive Silo Vent Filter
40-35-8130	Unit 40 Slip Additive Silo Vent Filter
41-35-80LO	Unit 41 Loadout Railcar Filters
40-35-80LO	Unit 40 Loadout Railcar Filters
41-35-8011 41-35-8021	Unit 41 Loadout Storage and Off-Spec Silo Filters
40-35-8011 40-35-8021	Unit 40 Loadout Storage and Off-Spec Silo Filters
87-35-3120	SIT Deheeling Dust Filter

DATE: January 28, 2019

Attachment A

Permit No. 103832, N166M4, PSDTX1566M1, and GHGPSDTX196M1

Inherently Low Emitting Activities

<u>Activity</u>	<u>Emissions</u>				
	<u>VOC</u>	<u>NOx</u>	<u>CO</u>	<u>PM</u>	<u>H₂S/ SO₂</u>
Management of sludge from pits, ponds, sumps, and water conveyances	x				
Aerosol Cans	x				
Calibration of analytical equipment	x	x	x		x
Carbon can replacement	x				
Catalyst charging/handling				x	
Instrumentation/analyzer maintenance	x				
Meter proving	x				
Replacement of analyzer filters and screens	x				
Maintenance on water treatment systems (cooling, boiler, potable)	x				
Soap and other aqueous based cleaners	x				
Cleaning/maintaining sight glasses	x				
Hydroblast slab activities	x				
Draining of low vapor pressure materials to the process sewer	x				
Sampling and sample system purging	x				
Pigging	x				
Water washing empty drums or totes	x				

Date: October 30, 2020

Attachment B

Permit No. 103832, N166M4, PSDTX1566M1, and GHGPSDTX196M1

Routine Maintenance Activities

Pump repair/replacement
Fugitive component (valve, pipe, flange) repair/replacement
Compressor repair/replacement
Heat exchanger repair/replacement
Vessel repair/replacement
Reactor Maintenance
Filter Maintenance/Replacement
Dryer/Treater Maintenance
Instrumentation repair/replacement (> inherently low emitting sources)
Miscellaneous equipment repair/replacement (e.g. valves, piping, spools, specialty equipment)
Process vent system maintenance
Process vent routed to flare during unit outages
Alternate flash tank cleanout

Date: October 30, 2020

Attachment C

Permit No. 103832, N166M4, PSDTX1566M1, and GHGPSDTX196M1

MSS Activity Summary

Facilities	Description	Emission Activity	EPN
all process units	process unit shutdown/depressurize/drain	vent to flare	42-97-9610 81-97-9611
all process units	process unit purge/degas/drain	vent to atmosphere	MSS-EQUIP
all process units	process unit startup	vent to flare	42-97-9610 81-97-9611
all process units and tanks	preparation for facility/component repair/replacement	vent to flare	42-97-9610 81-97-9611
all process units and tanks	preparation for facility/component repair/replacement	vent to atmosphere	MSS-EQUIP MSS-ATM
all process units and tanks	recovery from facility/component repair/replacement	vent to flare	42-97-9610 81-97-9611
all process units and tanks	recovery from facility/component repair/replacement	vent to atmosphere	MSS-EQUIP MSS-ATM
all process units and tanks	preparation for unit turnaround or facility/component repair/replacement	remove liquid	MSS-LOAD 42-97-9820 81-97-9611
all production-related	all production related facilities	painting	Authorized by PBR
all floating roof tanks	tank roof landing	operation with landed roof	MSS-MISC MSS-CONT
all floating roof tanks	degas of tank with landed roof	controlled degassing	MSS-MISC MSS-ATM
all tanks	tank cleaning	cleaning activity and solvents	MSS-MISC MSS-ATM
see Attachment A	miscellaneous low emitting activities	see Attachment A	42-97-9610 MSS-EQUIP MSS-ATM
all production-related	abrasive blasting	PM from blasting media	SAND-01
All tank roof landing	Controlled roof landings	Vent to portable control	MSS-TKCONT MSS-CONT

Date: October 30, 2020

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 103832, N166M4, and PSDTX1566M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
40-36-1013	Unit 40 Catalyst Activator Heater	VOC	0.03	0.14
		CO	0.49	2.17
		NO _x	0.24	1.05
		PM	0.05	0.20
		PM ₁₀	0.05	0.20
		PM _{2.5}	0.05	0.20
		SO ₂	0.08	0.36
40-36-1013 MSS	Unit 40 Catalyst Activator Heater MSS (7)	CO	2.60	-
		NO _x	0.39	-
41-36-1113	Unit 41 Catalyst Activator Heater	VOC	0.03	0.14
		CO	0.49	2.17
		NO _x	0.24	1.05
		PM	0.05	0.20
		PM ₁₀	0.05	0.20
		PM _{2.5}	0.05	0.20
		SO ₂	0.08	0.37
41-36-1113 MSS	Unit 41 Catalyst Activator Heater MSS (7)	CO	2.60	-
		NO _x	0.39	-
40-35-1014	Unit 40 HEPA Activator Filters A/B	VOC	2.50	0.37
		SO ₂	1.24	1.68
		PM	0.09	0.10
		PM ₁₀	0.09	0.10
		PM _{2.5}	0.09	0.10

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
41-35-1114	Unit 41 HEPA Activator Filters A/B	VOC	2.50	0.37
		SO ₂	1.24	1.68
		PM	0.09	0.10
		PM ₁₀	0.09	0.10
		PM _{2.5}	0.09	0.10
41-35-6105	Unit 41 Additive Bag Discharger Filter	PM	0.03	0.10
		PM ₁₀	0.03	0.10
		PM _{2.5}	0.03	0.10
40-35-6105	Unit 40 Additive Bag Discharger Filter	PM	0.03	0.10
		PM ₁₀	0.03	0.10
		PM _{2.5}	0.03	0.10
41-35-61AD	Unit 41 Additive Hopper Filters A, B, C, D	PM	0.09	0.01
		PM ₁₀	0.09	0.01
		PM _{2.5}	0.09	0.01
40-35-61AF	Unit 40 Additive Hopper Filters A, B, C, D, E, F	PM	0.14	0.01
		PM ₁₀	0.14	0.01
		PM _{2.5}	0.14	0.01
40-35-6181	Unit 40 Talc Additive Receiver Filter	PM	0.12	0.15
		PM ₁₀	0.12	0.15
		PM _{2.5}	0.12	0.15
40-35-6191	Unit 40 Slip Additive Receiver Filter	PM	0.07	0.11
		PM ₁₀	0.07	0.11
		PM _{2.5}	0.07	0.11
40-35-6401	Unit 40 Central Vacuum Secondary Filter	PM	0.03	0.03
		PM ₁₀	0.03	0.03

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		PM _{2.5}	0.03	0.03
40-35-8103	Unit 40 Blower Guard Filter	PM	0.06	0.06
		PM ₁₀	0.06	0.06
		PM _{2.5}	0.06	0.06
41-35-6401	Unit 41 Central Vacuum Secondary Filter	PM	0.03	0.03
		PM ₁₀	0.03	0.03
		PM _{2.5}	0.03	0.03
40-35-3102	Unit 40 S-1 Catalyst Charge Purge Filter	PM	0.01	0.05
		PM ₁₀	0.01	0.05
		PM _{2.5}	0.01	0.05
41-35-3102	Unit 41 PF Catalyst Charge Purge Filter	PM	0.01	0.05
		PM ₁₀	0.01	0.05
		PM _{2.5}	0.01	0.05
41-35-6310	Unit 41 Pellet Surge Hopper Filter	VOC	18.40	(5)
		PM	0.04	0.15
		PM ₁₀	0.04	0.15
		PM _{2.5}	0.04	0.15
40-35-6310	Unit 40 Pellet Surge Hopper Filter	VOC	18.40	(5)
		PM	0.04	0.15
		PM ₁₀	0.04	0.15
		PM _{2.5}	0.04	0.15
40-35-8120	Unit 40 Talc Additive Silo Vent Filter	PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
40-35-8130	Unit 40 Slip Additive Silo Vent Filter	PM	0.02	0.06
		PM ₁₀	0.02	0.06
		PM _{2.5}	0.02	0.06

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
41-25-6301	Unit 41 Pellet Dewatering Dryer	VOC	18.40	(5)
40-25-6300, 40-25-6301	Unit 40 Pellet Dewatering Dryers	VOC	18.40	(5)
41-35-80LO, 41-35-8011, 41-35-8021	Unit 41 Loadout, Storage, and Off-Spec Silo Filters	VOC	18.40	(5)
		PM	0.16	0.54
		PM ₁₀	0.16	0.54
		PM _{2.5}	0.16	0.54
40-35-80LO, 40-35-8011, 40-35-8021	Unit 40 Loadout, Storage, and Off-Spec Silo Filters	VOC	18.40	(5)
		PM	0.16	0.54
		PM ₁₀	0.16	0.54
		PM _{2.5}	0.16	0.54
40-35-6500	Unit 40 Talc Vent Filter	PM	0.04	0.04
		PM ₁₀	0.04	0.04
		PM _{2.5}	0.04	0.04
40-35-6501	Unit 40 Slip Vent Filter	PM	0.04	0.04
		PM ₁₀	0.04	0.04
		PM _{2.5}	0.04	0.04
87-35-3120	Unit 40 & 41 SIT Deheeling Dust Filter	PM	0.18	0.38
		PM ₁₀	0.18	0.38
		PM _{2.5}	0.18	0.38
PVOC-CAP	Unit 40 & 41 Pellet VOC Cap	VOC	(5)	42.61
MSS-EQUIP	Unit 40 & 41 Equipment Opening MSS	VOC	10.53	0.79
MSS-MISC	Unit 40 & 41 Miscellaneous MSS	VOC	1.00	1.10
MSS-LOAD	Unit 40 & 41 Waste Loading to Trucks	VOC	1.61	0.02
MSS-PM	Unit 40 & 41 Solids Handling	PM	3.75	0.67
		PM ₁₀	1.77	0.31

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		PM _{2.5}	0.27	0.05
42-97-9610	Unit 40 & 41 Flare	VOC	248.08	(9)
		CO	348.67	
		NO _x	72.11	
		SO ₂	15.21	
		H ₂ S	0.08	
42-97-9620	Unit 40 & 41 Vapor Destruction Unit	VOC	29.82	(9)
		CO	335.88	
		NO _x	41.37	
		SO ₂	4.29	
		H ₂ S	0.04	
42-97-9610 & 42-97-9620	Unit 40 & 41 Flare & Vapor Destruction Unit	VOC	(9)	65.22
		CO		446.91
		NO _x		89.96
		SO ₂		9.59
		H ₂ S		0.12
TOX	Unit 40 & 41 Thermal Oxidizer	VOC	0.10	0.42
		CO	0.58	2.55
		NO _x	0.58	2.55
		SO ₂	0.14	0.60
		PM	0.07	0.32
		PM ₁₀	0.07	0.32
		PM _{2.5}	0.07	0.32
42-97-9820	Unit 40 & 41 Wastewater API Separator	VOC	2.20	0.04
TK-01	Unit 40 & 41 Locomotive Engine Tank	VOC	0.55	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
42-95-0421	Unit 40 & 41 Fresh 1-Hexene Tank	VOC	0.37	0.94
42-95-0422	Unit 40 & 41 Fresh 1-Hexene Tank	VOC	0.37	0.93
SAND-01	Unit 40 & 41 Rail Repair Sandblasting	PM	1.43	0.06
		PM ₁₀	0.17	0.01
		PM _{2.5}	0.17	0.01
42-05-9201	Unit 40 & 41 Cooling Tower	VOC	0.84	1.58
		PM	3.30	10.95
		PM ₁₀	3.27	10.87
		PM _{2.5}	0.85	3.05
FUG-01	Unit 40 & 41 Fugitive Emissions (6)	VOC	4.71	20.61
EMG-ENG 1	Emergency Generator Engine	VOC	0.18	(8)
		CO	0.52	
		NO _x	8.07	
		PM	0.08	
		PM ₁₀	0.08	
		PM _{2.5}	0.08	
		SO ₂	0.01	
EMG-ENG 2	Emergency Generator Engine	VOC	0.18	(8)
		CO	0.52	
		NO _x	8.07	
		PM	0.08	
		PM ₁₀	0.08	
		PM _{2.5}	0.08	
		SO ₂	0.01	

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
EMG-ENG 3	Emergency Generator Engine	VOC	0.18	(8)
		CO	0.52	
		NO _x	8.07	
		PM	0.08	
		PM ₁₀	0.08	
		PM _{2.5}	0.08	
		SO ₂	0.01	
EMG-ENG 1, 2, 3	Emergency Generator Engine 1, 2, 3	VOC	(8)	0.03
		CO		0.08
		NO _x		1.21
		PM		0.01
		PM ₁₀		0.01
		PM _{2.5}		0.01
		SO ₂		<0.01
87-97-1510	Fire Water Pump Engine	VOC	0.08	<0.01
		CO	0.40	0.02
		NO _x	1.00	0.05
		PM	0.04	<0.01
		PM ₁₀	0.04	<0.01
		PM _{2.5}	0.04	<0.01
		SO ₂	<0.01	<0.01
EMG-ENGTK-1	Emergency Generator Engine Diesel Tank No. 1	VOC	0.10	<0.01
EMG-ENGTK-2	Emergency Generator Engine Diesel Tank No. 2	VOC	0.10	<0.01
EMG-ENGTK-3	Emergency Generator Engine Diesel Tank No. 3	VOC	0.10	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FWP-ENGTK	Fire Water Pump Engine Diesel Tank	VOC	0.01	<0.01
MSS-FRAC CC	Unit 40 & 41 Frac Tanks Carbon Control	VOC	0.07	<0.01
MSS-TKCONT	Unit 40 & 41 Temporary Control for Tank Roof Landing	VOC	2.43	0.01
		CO	1.03	5.08
		NO _x	0.77	3.81
		H ₂ S	<0.01	<0.01
		SO ₂	0.04	0.19
81-97-9611	Unit 81 Flare (Routine and MSS Emissions)	VOC	248.91	5.25
		CO	117.63	11.73
		NO _x	22.84	2.28
		H ₂ S	<0.01	<0.01
		SO ₂	0.19	0.02
FUG-02	Unit 81 Fugitives (6)	VOC	2.33	10.21
81-05-9202	Unit 81 Cooling Tower	VOC	0.09	0.39
		PM	0.06	0.25
		PM ₁₀	0.06	0.24
		PM _{2.5}	0.02	0.07
TK-1HEX1	Unit 81 1-Hexene Tank	VOC	1.80	-
TK-1HEX2	Unit 81 1-Hexene Tank	VOC	1.80	-
TK-1HEX3	Unit 81 1-Hexene Tank	VOC	1.80	-
TK-INTOL	Unit 81 Intermediate Olefins Tank	VOC	0.07	-
TKCAP	Unit 81 Tank Cap	VOC	-	9.29
LOADRACK	Unit 81 Uncollected Tank Truck Loading	VOC	0.10	<0.01
VCU-1		VOC	0.65	0.18

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	Unit 81 Collected and Controlled Railcar Loading	NO _x	2.76	2.38
		CO	2.76	2.38
		PM	0.34	0.30
		PM ₁₀	0.34	0.30
		PM _{2.5}	0.34	0.30
		SO ₂	0.27	0.23
MELT	Unit 81 MELT Handling Uncontrolled Emissions	VOC	0.44	0.21
MELT-TO	Unit 81 Melt Handling Controlled Emissions	VOC	0.03	0.13
		NO _x	0.30	1.31
		CO	0.30	1.31
		PM	0.04	0.16
		PM ₁₀	0.04	0.16
		PM _{2.5}	0.04	0.16
		SO ₂	0.03	0.13
MSS-ATM	Unit 81 Uncontrolled MSS	VOC	93.71	2.38
		PM	0.10	<0.01
		PM ₁₀	0.05	<0.01
		PM _{2.5}	0.01	<0.01
MSS-CONT	Unit 81 Controlled MSS	VOC	7.48	0.16
		CO	2.19	0.13
		NO _x	1.56	0.21
		PM	0.08	0.01
		PM ₁₀	0.08	0.01
		PM _{2.5}	0.08	0.01
		SO ₂	0.01	<0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

Emission Sources - Maximum Allowable Emission Rates

- (3) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
- | | |
|-------------------|---|
| VOC | - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 |
| HRVOC | - highly reactive volatile organic compounds as defined in 30 TAC § 115.10 |
| IOC-U | - inorganic compounds (unspeciated) |
| NO _x | - total oxides of nitrogen |
| SO ₂ | - sulfur dioxide |
| PM | - total particulate matter, suspended in the atmosphere, including PM ₁₀ and PM _{2.5} , as represented |
| PM ₁₀ | - total particulate matter equal to or less than 10 microns in diameter, including PM _{2.5} , as represented |
| PM _{2.5} | - particulate matter equal to or less than 2.5 microns in diameter |
| H ₂ S | - hydrogen sulfide |
| CO | - carbon monoxide |
| HAP | - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C |
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Annual VOC emissions for this source are authorized under the Pellet VOC cap (EPN: PVOC-CAP).
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (7) MSS annual emissions included in routine.
- (8) 3 emergency engines are authorized and are represented to operate up to 100 hours each per year, with a combined total power output total of 1.5 MW and annual emission cap.
- (9) Flare and Vapor Destruction Unit emissions combined on an annual basis.

Date: October 15, 2021

Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX196M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
40-36-1013	Unit 40 Catalyst Activator Heater	N ₂ O (5)	—	0.01
		CH ₄ (5)	—	0.06
		CO ₂ (5)	—	3061.02
		CO _{2e}	—	3064.19
41-36-1113	Unit 41 Catalyst Activator Heater	N ₂ O (5)	—	0.01
		CH ₄ (5)	—	0.06
		CO ₂ (5)	—	3061.02
		CO _{2e}	—	3064.19
42-97-9610	Flare	N ₂ O (5)	—	1.18
		CH ₄ (5)	—	355.63
		CO ₂ (5)	—	124768.91
		CO _{2e}	—	134011.79
VDU	Vapor Destruction Unit	N ₂ O (5)	—	0.02
		CH ₄ (5)	—	0.53
		CO ₂ (5)	—	31,539.58
		CO _{2e}	—	31,558.19
TOX	Thermal Oxidizer	N ₂ O (5)	—	0.01
		CH ₄ (5)	—	0.12
		CO ₂ (5)	—	5271.27
		CO _{2e}	—	5278.42

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MSS-TKCONT	Temporary Control for Tank Roof Landing	N ₂ O (5)	—	<0.01
		CH ₄ (5)	—	0.03
		CO ₂ (5)	—	1,509.16
		CO _{2e}	—	1,510.73
FUG-01	Fugitives	CH ₄ (5)	—	309.36
		CO _{2e}	—	7734.05
PVOC-CAP	Pellet VOC - Cap	CH ₄ (5)	—	2.76
		CO _{2e}	—	68.94
EMG-ENG 1, 2, 3	Emergency Generator Engines 1, 2, 3	N ₂ O (5)	—	<0.01
		CH ₄ (5)	—	<0.01
		CO ₂ (5)	—	38.68
		CO _{2e}	—	38.82
87-97-1510	Fire Water Pump Engine	N ₂ O (5)	—	<0.01
		CH ₄ (5)	—	<0.01
		CO ₂ (5)	—	12.33
		CO _{2e}	—	12.37
42-05-9201	Cooling Tower	CH ₄ (5)	—	0.05
		CO _{2e}	—	1.30
47-97-9820	Wastewater	CH ₄ (5)	—	<0.01
		CO _{2e}	—	0.02

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MSS-EQUIP	Equipment Opening MSS	CH ₄ (5)	—	0.03
		CO _{2e}	—	0.65
MSS-MISC	Miscellaneous MSS	CH ₄ (5)	—	0.02
		CO _{2e}	—	0.55
MSS-LOAD	Waste Loading to Trucks	CH ₄ (5)	—	<0.01
		CO _{2e}	—	0.01
MSS-FRAC CC	Frac Tanks Carbon Control	CH ₄ (5)	—	<0.01
		CO _{2e}	—	<0.01

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) N₂O- nitrous oxide.
CH₄- methane.
CO₂ - carbon dioxide.
CO_{2e} - carbon dioxide equivalents based on the following Global Warming Potentials
(Effective January 1, 2015): CO₂ (1), N₂O (298), CH₄ (25).
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Emissions updated to be consistent with the records required by 30 TAC §116.164(b).

Date: October 15, 2021